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COMPENDIUM

OF THE

PRINCIPLES AND PRACTICE  
OF MEDICINE,

EMBRACING THE MOST RECENT IMPROVEMENTS IN THE SCIENCE,

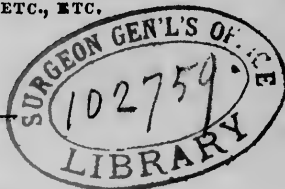
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TO  
MEDICAL STUDENTS AND PRACTITIONERS,  
IN THE  
UNITED STATES OF AMERICA,  
WHO PREFER  
"NEW TRUTHS" TO "OLD ERRORS,"  
WHO ARE WILLING  
TO INVESTIGATE BEFORE CONDEMNING,  
AND WHO DARE TO  
THINK AND ACT INDEPENDENTLY,  
THIS COMPENDIUM  
IS  
VERY RESPECTFULLY DEDICATED  
BY  
THE AUTHORS.





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## P R E F A C E .

This volume presents an epitome of Medical Practice, based on the **UNITY** of all disease, as characterized by Intermittency and Periodicity.

The object of the authors, is, the recommendation of that practice in the different modifications of disease herein described, which they, in common with several hundred practitioners—in every section of the country—have found to be the most philosophical and the most successful.

The ordinary text books, in their therapeutical repletion, enumerate such a multiplicity of remedies, as to render a judicious selection, almost impracticable by the young and inexperienced practitioner, a fact which arises from a want of knowledge, on the part of their authors, that all remedies act primarily upon the **BRAIN**, and thence electrically, or magnetically, upon the totality of the whole system.

The reader will be probably surprised to find that the antiphlogistic treatment—to wit., copious venesection, purgation, and a regimen nearly approaching starvation—finds no favor in these pages. That heroic treatment has been by the old schools recommended for the prevention of derangement of structure,—a result more readily attainable by an attentive observation of Paroxysm and Remission.

This work is mainly practical:—Many points, at first sight speculative and conjectural, could have been maintained by reasonings and sustained by results; but lengthened arguments would have been out of place in a Compendium, and would, moreover, by enlarging the size, have added to the cost of the volume.

Deeply interested in all they have herein described, and ardently devoted to Medical Science and its advancement, the authors trust that to the junior members of the profession, and

to those whose acquaintance has been rather with books than with actual disease, their earnest endeavors to promote a knowledge of the most efficient remedies, and their therapeutical application, will not prove unacceptable.

Their only ambition is to diffuse the light of a sound and practical medical philosophy—a philosophy whose harmonies are in unison with the harmonies of nature, and whose adoption by the profession will yet more gloriously exalt its noble mission, by making it more successful in “healing all manner of diseases,” and in diffusing joy and gladness in the habitations of the suffering.

## INTRODUCTORY GENERAL PRINCIPLES.

THE "New School" system of medicine teaches (1,) the unity, periodicity, and consequent intermittency or remittency of *all* disease,—“ a fact (says Prof. T. D. Mitchell) as well established as any other in medicine.” Intermittent Fever or Ague, then, is the type of all disease ; and every form of disease is only a modification or development of the primitive type.

2d. There can be *no disease* without a *general constitutional disturbance* : *Local diseases* are only a *development* or *result* of a series of *constitutional disturbances*, determined by *predisposition* to the weakest part or parts of the body.

This predisposition to disease of one part more than another, is the result of a *less degree of cohesion* of the atoms of the part, rendering it more liable to disorganization.

3d. There can be no disease without a *change of motion* of the atoms of the organism ; and there can be no change of atomic motion without *change of temperature* : And these morbid changes or evidences of *constitutional disturbance* are always periodic and intermittent.

Hence arises ague, or intermittent fever,—characterized by **THREE** marked changes of the condition of the body—its functions and secretions. Those changes are *chill*, *heat*, *swcat*, and their successive occurrence constitutes a paroxysm or fit, which is followed by a *periodic intermission*, or regular interval of comparative health.

4th. These stages are called by “New School” Practitioners, **DEPRESSION**, **ACCESSION**, **REACTION**, and the **HEALTH EFFORT**; and they are found in every case of disorder—they are the invariable attributes of every development of disease. Depression is the result of an abnormal attraction of the atoms of the organism, and is characteristic of the *negative* or electrical state, which is marked by a partial or general increase of the secre-

tiens. Accession is abnormal atomic repulsion, and marks the *positive* or magnetic state, and is further characterized by suspension or suppression of the secretions. During the period of Reaction, the life forces are struggling against the disturbance to which they have been subjected; and this struggle develops the health effort, or period of intermittent equilibrium.

This intermittent period may be of longer or shorter duration, according to circumstances,—prolonged by proper treatment, arrested by improper; and thus the paroxysm returns, characterized too by uniformity, or otherwise.

5th. Through the Brain and Nerves, or Cerebro-spinal system, we see, feel, think, reflect, talk, walk, and perform all our pleasurable duties. By means of this system, a complete order or harmony of movement is maintained throughout the various organs of the machine. By acting on this system every possible constitutional disorder may be produced, whether from within or without; and through the same medium, medicinally or otherwise, the greatest apparent *diversity* of disorder can be rectified. It is to *this* system—that source of all motion and emotion—the charlatan most generally directs his remedies, whether physical or psychical, and hence his frequent success while the great majority of the profession, from a too great neglect of this, and a too exclusive attention to the mere mechanical details of the organism, and its local symptoms, scarcely pass a day without having to blush for the blunders they were taught, in their schools of physic, to call science.

6th. All medicinal forces act electrically, and like all other electrical bodies, possessing both the force of *attraction* and the force of *repulsion*, they must necessarily exercise under different electrical conditions of the human brain, a *duplex* power over the various organs they respectively influence. Attraction and repulsion are the two grand forces by which, not the motions of the human organism alone, but the motions of the universe are controlled; and by these forces *and no other* can animal life be influenced either for good or evil, whatever may be the nature of the agent by which they are called into action.

Electricity can be so applied as to produce *attraction* and *repulsion* in all bodies without any alteration of their constituent nature; and it can also be applied to almost every compound body so as to effect a true chemical decomposition of its constituent elements. The direct application of this subtle and universal power to the living body, has caused, cured, or aggravated almost every conceivable manifestation of disease.

As in the instance of the magnetic needle, whose polarity or *motive power* it can induce, reverse or destroy,—so can it also increase, decrease, or destroy each of the functional motions of the various parts or organs of the living body, to which it may under particular circumstances be applied. It has caused and cured palsy, and strychnia has done the same; like quinine and arsenic, it has caused and cured the ague; with opium, it has cured cramps and asthma, and induced them even as prussic acid and nitrate of silver have, when administered under similar circumstances. Hence the action of medicinal substances is purely electrical, and any given remedy may produce, like electricity, *opposite results* even when administered to two patients who are supposed to be suffering under the same nosological disease;—facts unknown or unrecognized by the teachers and professors of the “Old Schools.”

7. Medicinal substances exert an influence over one part of the organism in preference to any other, by the same law of Elective affinity which determines the combination of inorganic bodies.

As before said, strychnia will in some cases produce paralysis, and in others wake up to action the paralyzed nerves. Now the atoms of a given portion of the brain of any two individuals thus oppositely influenced by the same medicinal agent, if in an opposite electrical state,—*negative* in the one, and *positive* in the other; and should we not expect opposite results to be developed, when one remedy is made to act upon two bodies diametrically opposite? Again, a remedy perfectly appropriate in one stage of the series of the phases of any disease, is absolutely injurious in each of the other recurring stages; a remedy may be work-

ing with the system one hour, and if repeated four hours afterwards may be working against the laws of periodicity and thereby aggravating the disease. From this cause, disease is not unfrequently perpetuated from week to week, and the patient is made a sicker man by the remedies given him, simply because neither the nature of the disease, nor the action of the remedy is understood.

In conclusion we assert that the many diseases which physicians for thousands of years have been treating as so many distinct and separate localisms, are all in reality results, or developements of repeated *intermittent* attacks of general febrile disturbance; that such "localisms," if not directly produced by chemical or mechanical injuries, will invariably be found to have been preceeded by chills, heats, and sweats, general or partial; or in defect of the sweats, by a morbid increase of the secretion from the kidneys, or some other secretory organ; of each and all such general symptoms, the attentive observer will in every case detect intermissions, or remissions, all more or less periodic and complete;—and further, that external injuries, whether produced by chemical or mechanical agencies, are followed by the same constitutional phases of disorder, which precede the development of the several localisms of disease.

Remedial agents are either *remittent*, or *intermittent*. Remittent remedies act electrically, increasing the secretions, and inducing depression—of which, emetine is the type:—Intermittent remedies act magnetically, suspending or suppressing the secretions, and inducing a state approximating to the febrile—of which, quinine is the type. Remittents are employed when the magnetic state predominates; Intermittents are indicated where the electrical phenomena predominate.

There are also symptomatic remedies, appropriate to special indications, as alkalis for stomachic acidity &c., and anti-periodics designed to perpetuate the Intermission into renewed health.

The general doctrines of Therapeutics, and the details of

**Materia Medica**, are fully discussed in the "Compendium of Mat-Med. and Therap," to which the reader is referred.

Let students, and young practitioners, (if older men will not, examine for themselves, and they will find that it is a **LAW** (*Marshall Hall*,) that all diseases are essentially intermittent, (*Mitchell*) and that there can no more be an "eternal or continuous paroxysm of any disease, than there can be an eternal passion, or an eternal storm" (*Dickson*.)

From the principles thus briefly advanced, it is self-evident that if the constitutional disturbance be arrested, and its paroxysms subdued, all the local developements to which the constitutional disturbance gave rise, (developements resulting from a greater predisposition to disease of some part more than any other) will also disappear, and seldom will those local manifestations require any local remedy whatever.





## SECTION I.

### INTERMITTENT FEVER, OR AGUE.

ALL diseases being in their nature *febrile*,—and all Fevers having a tendency to become intermittent and repetitive, with *periods* more or less perfect, the general treatment of all diseases must of necessity rest on a common principle : And the *true* principle of treatment in every disorder resolves itself into,—1, To shorten and subdue the intensity of the paroxysmal suffering as speedily as possible,—whatever be the name or supposed *seat* of the disease,—and thus obtain an intermission,—2, To prolong as far as possible this *Intermission* or interval of immunity from pain or sickness ; and,—3, To prevent paroxysmal return ; and by so doing, every curable disease must soon eventuate in health.

Intermittents, whether quotidian, tertian, quartan, semi-annual, annual or triennial—whether *masked*, as in the case of “brow ague” or pain over the eye, occurring at more or less regular periods, ear-ache, or tooth-ache,—whether pain in the side, or cramp of the leg,—a partial loss of voice or loss of hearing *at times*,—all these various intermittent affections, require nearly the same treatment.

During the COLD STAGE (depression) place the patient at once under the anæsthetic influence of chloroform, more especially if spasm has attended a previous paroxysm. Thus the cold stage will not only be cut short, but the subsequent stages will likewise be rendered more mild and tractable.

Should the patient object, from prejudice or otherwise to this mode of treatment, give him a large draught of a hot infusion of capsicum, or ginger, and if requisite, use sinapised pediluvia, apply sinapisms to the spine, &c : Or, where practicable the patient may be subjected to the administration of the vapor bath, whereby his state will be at once changed from the first (depression) to the third (reaction) stage, thus wholly preventing the development of the febrile paroxysm and its attendant evils. The occurrence of the febrile paroxysm being thus prevented, the appropriate Intermittents may be at once employed.

The *hot* or *febrile* stage (accession), may be subdued by nauseants or emetics, by sudorifics, cold affusions and cold drinks, or by the "wet sheet"—all Remittents, of which emetine, in its action, is the type.

The *hot* stage may also be shortened by blood letting : But this is objectionable, because it deprives the body of the material of repair,—while the tendency to paroxysmal return so far from being prevented, is very much increased thereby.

When the *sweating* stage (reaction) ensues, let the surface of the patient be frequently cleansed from the accumulation of secretions, by the use of a wash cloth or sponge and warm water, to which vinegar may be added just sufficient to impart a slightly acid flavor. Care should be taken during this process, that the patient be not chilled by currents of air, open windows, etc. When the surface becomes dry and of a natural and uniform temperature, the intermittent period is fully developed.

During the *intermission* (health effort) the most important part of the physician's duty is to be done. His business is (1) to prolong the intermission, and (2) thereby prevent

paroxysmal repetition,—objects obtained by the exhibition of appropriate intermittents, of which quinine is the type.

Remission may be attained, and determination of vital action towards internal organs averted, by emetine in 1-8 to 1-4 gr. doses every five minutes, by pediluvia, warm bath, etc.

With emetine, lobeline may be conjoined in cases of hurried and painful respiration; or with digitaline, when the arterial circulation is largely increased in force and frequency.

Intermission being fully established, let quinine, in doses of from 2 to 10 grs., alone, or in combination with other intermittents be administered—repeating the dose from one to four hours, as may be indicated by the intensity of the previous paroxysm. The following are the most available of this class—piperine, salicine, the salts and oxides of iron, opium and its elements, the vegetable astringents, and in chronic cases, the employment of nitrate of silver and arsenic may be indicated.

The following intermittent combinations are available :

R. Potass. Cyanuret., gr. ii. Ferri Citratis, gr. xvi. Salicin., gr. xxxii. Aquæ distillat., ℥ ii. M. Let one to two teaspoonsful be given at intervals of 1 to 4 hours, so long as the intermission continues.	R. Ferri Phosphatis, ℥ ii. Zinci Sulph., 3ss. Quin. Sulph., 3 i. M. Three to twelve grains may be given at intervals of one to four hours.
	R. Quin. Sulph., 3 i. Piperin., 3 ii. Salicin., 3 iii. M. Dose, &c., as the preceding.

These combinations are designed to economise the cost of quinine, and are equally efficacious.

One hour before the probable repetitive paroxysm, the following anti-periodic may be given in water :

R. Capsici. Tinct., (fort.)  $\zeta$  i.

Sol. Sulph. Morph., gtt. xx. (grs. iv. to  $\zeta$  i. of water.)

Acid. hydrocyan. Med., gtt. ii—iv.

Or the intermittent employed may be doubled in quantity, to which Morph. Sulph. gr. 1-3 may be added.

Should the paroxysm be repeated notwithstanding the exhibition of the preceeding remedial means—it must be again subdued by the administration of remittent remedies ;—but the paroxysm, if repeated, will be found to have been greatly modified and shortened when compared with the previous one.

Under the above treatment, splenic enlargement, or *ague cake* will seldom be found, but should they occur, the intermittents may be continued in smaller doses, conjoined with podophylline, leptandrine, or irisine, in appropriate doses.

Dropsy, too, which is not unfrequently a sequence of ague, when unphilosophically treated, may be in most cases promptly subdued by quinine and iodide of potassa, or indeed by any good intermittent combination, due regard being had to the paroxysmal phases of the case.

The application of the "*intermission period*" to other diseases is as numerous, or as universal as are the diseases recognized by the "old school."

Mrs. S. had a violent pain in her left side for 10 minutes at a time, which recurred every two hours,—10 grs. quin. with 10 of carb. iron, and 5 of ginger, prevented the pain from returning.

Mr. L. had been afflicted with a violent pain in the right hypochondriac region "by spells" for some days: A few doses of quin. and iron, given in the absence of the pain, soon relieved him.

Mr. P. complained of great dullness of hearing and ring-

ing through one side of his head, particularly in the afternoon and evening, for 14 years. Hydrocyanic acid, ii gtt. in a teaspoonful of tinct. cinchona, soon cured him.

Mrs. M. was troubled "off and on" with some erysipeloid humor or inflammation of the ear;—10 gtt. Fowler's solution, *ter die*, for a short time, cured her.

Mr. H. was laboring under pneumonia—fever, cough, distress generally; great dyspnœa ensued every day about 11 o'clock, which passed off in the night by copious perspiration, etc. Ten grs. quin., at 10 o'clock in the morning for three successive days, dispelled every unpleasant symptom.

Loss of voice, and loss of locomotion, are in like manner curable. But we need not anticipate more. These cases are sufficiently numerous and various, to show the reader under what variety of forms we may have intermittent fever; and also by these are we taught the correct principle of treatment.

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## SECTION II.

### INTERMITTENT FEVER, ITS MODIFICATIONS.

#### *1st, Remittent.*

Having briefly described the type of all disease, and the treatment it demands,—we next pass to the consideration of the varied modifications of the one type, as developed in the several forms of disease, and maintained by the old school nosologists to be so many distinct diseases.

As the one type becomes modified in its manifestations by predisposition, habits of life, age, climate, temperature, ex-

posure, etc., we find the constitutional, or febrile disturbance under these influences, developed with increased intensity at some special point, or upon some special part of the system ; and this development or localisation of constitutional disorder is manifested by a set of results or symptoms, from which results or symptoms, the disorder has been named. When from predisposition and other causes, the primitive constitutional disturbance is mainly directed to the head, we have the disease called *brain fever*—when to the lungs, we have lung fever ; and when the portal circle is mainly subjected thereto, we have that class of fevers recognised as remittent—amongst which the Bilious, Typhoid, Typhus, and Yellow Fevers may be enumerated ; disorders varying greatly in their intensity, and yet all being but so many different shades, modifications or aggravations of the primitive type.

As true intermittent fever is modified by any or all of the influences we have named, so will its several phases be modified, intensified, or obscured. The phases may be less distinctly marked,—in some cases the first (depression) and third (reaction) stages may be greatly shortened and subdued, and the accession or fever stage greatly intensified, whilst at the same time the intermission, or health effort, is also shortened, and sometimes so feebly developed, as to have given rise to the phrase “ continued fever.”

But whatever may be the manifestations of the form of disease, the type remains unchangeable ; and because types are thus immutable, the phases of the type will always be found in every form of disease, notwithstanding they may be modified and greatly subdued ; and in some instances they may be so greatly subdued and shortened, as to be

hidden from the eye of all but the closest observation, and the keenest scrutiny.

In our review of the varied modifications of the primitive type, REMITTENT FEVER first demands our consideration.

When from any cause, the intermissions, or immunity from suffering are greatly shortened, and instead of extending to a day or days, they are only an hour or two in duration, the disease is no longer called by the old school, Intermittent, or Ague—but it must be nosologically designated Remittent Fever; and this has been divided into simple and bilious: the latter is however only the former intensified, as the Remittent Fever is only a modification of the Intermittent Fever, or type. In Remittent Fever the gravity of the constitutional disturbance is developed upon the portal circle, and its nerves, whilst at the same time the whole organism is more or less seriously involved.

In its milder form it is characterised by *Malaise*, chills or rigors, pain in the limbs, more severe in the loins, great head ache, the arterial circulation increased in force and speed, with high fever. The paroxysms are generally found after noon, extending into the evening or night, followed by a remission, usually well marked in the morning.

*Treatment.*—During the paroxysm, nauseating doses of emetine or lobeline, pushed to emesis, if indicated; physic, as podophylline or leptandrine; and if requisite, warm water affusion, or the warm or vapor bath. Upon the attainment of remission, administer prompt intermittents, as quinine, etc; and where there is much cerebral disturbance, hydrocyanic acid in two to five drop doses, and if requisite, cold—as the dash or douche to the head,

*2d, Bilious Remittent Fever.*

As Remittent Fever is a modification of Intermittent Fever, so in like manner is the Bilious only an aggravation of the simple remittent : indeed intermittent fever may by an injudicious treatment, or from other causes, become remittent—and then continue to become the subject of daily aggravation, until those symptoms are developed which are recognized as proper to the disease under consideration.

Bilious differs from simple remittent fever, in the greater gravity of its marked characteristics. The biliary organs and their secretions are seriously deranged,—the stomach is irritable, and there is frequently nausea, and sometimes vomiting,—bilious discharges, and great cephalic distress, the result of general constitutional disturbance, aggravated by sympathetic relation.

In intermittent fever the phases of depression and accession may be extreme, but during the intermission there is little departure from the usual state of health, or the equilibrium of the electric (motor) and magnetic (sensor) forces. As the case becomes remittent, and the intermissions are shortened and subdued, an increase of secretions generally marks the preponderance of the electrical state, and this preponderance becomes yet more strongly marked, as the bilious modification is developed. Hence in bilious fever, the discharges are largely increased in quantity and frequency. Should the disease yet progress, the typhoid form is soon developed, in which the electrical state, (depression) is yet more strongly marked ; and the typhoid may soon pass into that development called



typhus gravior, in which the electrical state, or depression, becomes the most alarming feature of the case.

As before remarked, these several modifications are greatly influenced by place, season, temperature, habits, etc.; hence their developments may greatly differ at different times, and in various localities. Their intensity may, from these causes, be greatly modified. Sometimes delirium may be general; at some other period irritability of the stomach may be the most prominent symptom; and in other cases and localities, stupor and other evidences of the electrical state may be most prevalent. These several modifications, arising from the incidents named, may be nosologically and nonsensically designated, Remittent, Bilious, Typhoid, Typhus, Yellow, Adynamic fever, etc., etc.; and yet it must be admitted that these several forms, with all their diversity and aggravation of symptoms, are only modifications and aggravations of the phases of the type of all disease—intermittent fever; and the same fact is apparent in the widely differing forms and attack of scarlatina, but is it not self-evident that those several developments of scarlatina are only grades of that modification of the intermittent-type, known nosologically by that designation.

Let it be remembered that *paroxysm* and *remission* are the characteristics of every development of disease: they may sometimes be greatly obscured, but they must be sought for with the most watchful scrutiny, for upon their due observation and appreciation depends all sound, rational, and successful practice. If the great fact of paroxysmal remission be overlooked and mis-improved, the treatment of the case can only perpetuate the disease; and when thus perpetuated by maltreatment two or three weeks, need it excite

any surprise that the case should be marked by a continually increasing prostration and exhaustion? that the bowels should become terribly irritated? that the stomach, from the same cause, should alike reject medicine and nutrition? that tympanitis should exist—that the continual employment of cathartics should induce ulceration? that subsultus, delirium, and typhoid, or enteric fever should ultimately set in, and thereby put an end to the sufferings of the unhappy victim to professional ignorance, or professional bigotry, by terminating the life of the tortured patient.

What has been the almost universal treatment of bilious remittent fever by the old schools? calomel and Dover's powder, blood-letting and cathartics, blue pill and ipecac,—given in the futile hope of cleansing the tongue and correcting the secretions.

What are the indications, and how should this disease be treated? The first and important indication is to procure a remission by nauseants, emetics, cathartics or enemata;—this attained, the administration of Intermittents must be prompt and effective; quinine may be given in doses of from 2 to 10 grains, every two to four hours. By the adoption of this treatment, the paroxysmal repetitions are at once averted, or very greatly subdued in their intensity, and local determinations are prevented. Thus, too, the tendency to the electrical state (depression) is overcome, and the subsequent exposure of the patient to typhoid or enteric fever is avoided.

In cases of intense irritability of the stomach, dry cupping will often afford relief,—and a solution of cyanuret potassa, 1 to 4 drs. to the pint of water, may be used for the same purpose. In extreme cases, a blister may be applied over the disturbed organ, and this may be further

aided by the application of blisters inside the thighs, which may, after the removal of the cuticle, be dressed with quinine ointment—forty to sixty grains to the ounce; but these latter means will seldom be found necessary, where the appropriate treatment is promptly and early applied.

Dr. Hume says, on the coast of Africa, “we had to contend with a fierce enemy—bilious remittent fever—as it rages between the tropics; of sixty-six cases, not a death. None of your bleeding, leeching, cupping, salivating, physicing, drugging,—but quinine in large doses. This knocks the disease on the head at once, and your patient recovers, not a blanched and wretched remnant of humanity, but in a few days well and useful as ever.”

### *3d, Typhoid and Typhus Fever.*

This modification of the primitive type (Intermittent Fever) of all disease, has been nosologically called Typhoid, Typhus, Spotted, Maculated, Hospital, Jail, Ship, Potatoe, Enteric fever, etc.; but these several appellations, originating from the gravity of some special symptoms, or locality, are valueless in the treatment of the disease.

We have already remarked that all these phases of disease are only modifications, intensified in their localisms, of a general febrile disturbance of the totality of the system: that their several aspects only mark the continually increasing preponderance of the electrical state (depression). Any fever may, by injudicious treatment, or from local depressing causes, assume the typhoid form: bilious fever, erysipelas, puerperal fever, dysentery, etc., are but too frequently allowed thus to degenerate, or to glide into the lower and more prostrating forms of disease designated by the above names. Typhoid Fever is supposed to infer

a lesion of the glands of the alimentary canal,—true these lesions may exist, but they are the end and not the beginning, the effect and not the cause. Under the continually increasing tendency to organic degeneration, aided by the exhibition of cathartics and the tartrate of antimony, it is not surprising that lesions should be often found. Sometimes eruptions—called petechial—*taches rouges*—red spots, &c., may be seen in the progress of the disease, but these are incidentals and not essentials; they are only indications of extreme depression and degeneration. Prof. T. D. Mitchell says he has seen them in intermittent and remittent fevers, here, and in the West; but they are more frequently found in the typhoid form: but we must insist that the difference between the bilious, typhoid and typhus phases of Remittent Fever is not so great as that seen in the several developments of Scarlatina, and yet no one pretends to give to these several developments, distinctive nosological designations.

*Characteristics of Typhoid and Typhus Forms*—Frontal headache; epistaxis; eyes dull and heavy, sometimes of a reddish cast; inattention, passing into stupor, with dullness of hearing; some cough, mucus rale, etc., particularly in the winter or spring. Tongue brown, dry, red, cracked, but not generally black, as is usually affirmed: soon the abdomen becomes tympanitic and swollen, and diarrhœa ensues, with tenderness, etc.

The face wears a darker cast; there is greatly increased prostration, deeper stupor or coma, continued delirium, etc., as the typhoid passes into the typhus form. The duration of these modifications of disease is greatly dependent upon the mode of treatment adopted. They also

differ in different seasons, and become much more fatal in certain localities.

*Synopsis of Treatment.*—Let it be remembered that all the modifications of fever have, in common with their type, remission and paroxysm. To obtain a remission of the febrile paroxysm, a full emetic should be early administered; or emetine, in 1-4 gr. doses, (in solution) may be given every five minutes, until nausea and diaphoresis are well established. The cerebral disturbance may be alleviated by the temporary application of cold to the head, the cold dash (*Currie*) stimulating pediluvia, etc. The surface should be washed with warm water, slightly acidulated with vinegar, thereby removing all offensive exudations, and promoting the cuticular reaction. If the skin is at any time intensely hot, and the patient delirious, strip and pour eight to ten gallons of cold water over him, as was done by Letzham 80 years ago; or apply the wet sheet as recommended and adopted by Stallard, in Hospital practice.

But QUININE is the great remedy: it is at once powerfully anti-periodic and intermittent; and such being its magnetic character, it is directly antagonistic to that depression which induces the typhoid symptoms; and the earlier it is employed, the better,—because in the earlier stages of these modifications of disease, there are no *lesions* or *local* inflammations to combat. Give quinine, then, in full doses, at the very incipency of the disease: meet its first manifestations by the controlling and sustaining power of this great remedy. If deferred to a later period, it may not succeed:—this is the prevailing fault of the Faculty—they continue cathartics and other depletives, and defer the early administration of quinine, because—the tongue is not clean.

Case. A farmer, eight miles from Lexington, had copious hemorrhage after taking blue mass, Cooke's Pills, etc. Gave him 30 grs. of quinine, and applied blisters, which at once prevented the exacerbation, and the man soon got well.

Dr. Fearn, in the Southern Medical reports, 1850, states that "hemorrhage from the bowels had killed many." He then gave 20 grs. of quinine at a single dose, repeating it once, twice, or thrice hourly, by which the pulse was reduced from 120 to 80, before the second hour, and the skin was moist before the third dose was administered.

Dr. Bates, of Ala., in a paper published in the *Amer. Jour. of Med. Sci.*, says that in his region, typhoid fever is remittent, and quinine is the remedy.

Says Prof. T. D. Mitchell,—“even *typhoid fever*, which is evidently paroxysmal or periodical to a certain extent at the onset, is often cured by this medicine (quinine) when there is no lesion in the bowels to prevent the anti-periodic action.” Why then will the Faculty defer the exhibition of this remedy at the onset, when it is not from any cause contra-indicated? and by thus wasting time, allow the very lesions they so much dread, to be set up; and when thus set up, says Prof. M., no amount of quinine can be available. The same reasoning applies to every form and grade of fever, and its teachings should not be disregarded.

Dr. Flint, of Buffalo, in a paper published in the *Am. Jour. of Med. Science*, has shown conclusively that quinine may be administered even where there is decided nausea, and some vomiting. Repetition of the dose has had the effect of entirely subduing the gastric derange-

ment ; and it has thus prepared the way for the curative continuance of the remedy. We have found the following of great service in cases where nausea and vomiting were attendant symptoms :—

R. Quiniæ Sulph., gr. i.  
Ferri Mur. Tinct., gtt. xv. M.

To be given in a little sweetened or iced water ; it may be repeated at intervals of half an hour, if needed.

Dr. Macgreggor treated the bilious remittent fevers of India, with quinine, and Dr. Blair did the same in Demerara.

In the *low remittents* and *typhoid fevers* of the West coast of Africa, and Rio de la Plata, quinine was certain to make obscure remissions very complete, to clean off the tongue, and improve all the symptoms. (See *London Lancet*, July, 1846.)

In the *Philad. Medical Examiner*, Sept., 1849, is a criticism on the curative action of quinine in intermittents, in which the writer maintains that the same remedy cures *typhus* and *typhoid* fevers as well as *intermittents* and *remittents*.

If called late in the disease, let the quinine be given in small doses, conjoined with Calomel 1-20 to 1-10 gr., or what is better, with Podophylline and Irisine or Stillingine.

In extreme cases, with muttering delirium, often occurring where the drugging and purging (depression) system has been pursued, resort must be had to *local* means, as in these cases the stomach will seldom bear the exhibition of internal remedies. A blister may be applied to the abdomen, and the inside of the thighs, the surface denuded, and the *quinine cerate* used as a dressing : the cerate may vary in strength from 30 grs. to 2 drs. to the ounce.

The hemorrhagic discharges may be controlled by the administration of enemata of nitrate of silver, 1 dr. to the pint of water, throwing up one-half, and the second half in half an hour, if required : this arrests the hemorrhage, that great depressing element of the disease. For the same purpose ext. rhatany, sol. ehloride of soda, (1 to 2 drs. in water, q. s.) and iced water may be also used as enema. All these have reference to a symptom, merely ; they do not change or modify the typhoid form, as do quinine and ehlorate of potass ;—they act merely as local astringents. When looseness, hemorrhage, or nervous irritability are prominent symptoms, 1-6 to 1-8, or even 1-4 gr. of morphine, with 2 grs. quinine may be given at intervals of from one to two hours ; making irritating applications externally, as indicated. For abdominal uneasiness, dry cups may be applied thereto, or on each side the spine—light cataplasms, fomentations of hops, wormwood, etc., etc.

If hydro-cyanic acid be not readily attainable, make the following draught :—*peach leaves* a handful, to a quart of hot water—of which 1-2 to one wine glass full may be taken, and repeated in half an hour if needed. This draught will allay thirst and nausea ; the warm leaves, as a poultice, may be also applied to the epigastrium : larkspur given in a similar manner, will often be serviceable ; these draughts may be given either warm, or ice cold. For tympanitis, give turpentine and quinine with mucilage, etc.

*Convalescence* is a critical period for two reasons ; 1st, From the tendency to relapse, or to re-repeat the depraved functional and sensor movements ; and 2nd, because the pre-existing depression (the electrical state) favors the development of those forms or modifications of hereditary



transmissions, which may for years have been laying dormant ;—thus the tubercular predisposition is often called into action from this cause ; and the same remark holds good of other modifications of transmitted predispositions. A solution of quinine, acidulated by aromatic sulphuric acid is advisable for some weeks after the establishment of convalescence ; and medical practitioners will find it salutary to take daily a little of the same solution, thereby keeping up the magnetic forces, and in consequence warding off an attack of the disease.

#### *4th, Yellow Fever.*

It cannot be successfully disputed, that Yellow Fever is only a modification of bilious, itself a modification of the primitive type : indeed medical writers of the old schools have remarked the analogy existing between this manifestation of disease, and the Bilious Remittent. Prof. Dunglison, Rush, Caldwell, and Ramsay (of Charleston, S. C.) have alike admitted this relation,—a relation which if admitted by the schools, and made authoritative, will be at once an endorsement of the “New school” philosophy.

In the Year 1804, it was observed, in Charleston, that neglected (and oftener maltreated !) intermittents frequently terminated in yellow fever ; and Rush, during the Epidemic at the close of the last century, remarked that intermittent, remittent, bilious, and malignant yellow fever, run into each other, and as the latter modification receded from low and marshy grounds, it became more and more manageable,—the explanation of these facts, to the new school practitioner is simple and rational. Location and its coincidents, influence the *man* and not the *disease so called*. The low marshy ground and the swamp atmosphere rapidly

conduct, or draw off from the body its magnetic force, and hence the system soon sinks into the electrical state, and as that state becomes more predominant, the disordered movements become more intense: hence the *rationale* of the fact that the disease became more and more manageable as it is receded from the localities which continually added to the depression (the electrical state) of the patient, and these remarks apply with equal force, to the primitive type—the ague becomes more manageable, as it recedes from those localities where, in our Western States, it is aggravated by those external agencies which depress the patient;—hence a change of place, a removal northward or eastward, will often alone tend greatly to the cure of the disease;—indeed the student of nature will ever find, as has been well remarked by an eminent man and an able writer, that “the universe, to him who should have sufficient *comprehension* to behold it at a single view, would only appear one great fact—one mighty truth;” and disease, in all its manifold developments, in all its various modifications, will also be found to be “one great fact—one mighty truth:” it will be found to be a unity, marked by Intermission and Periodic phases—often, indeed greatly modified, whilst the type must for ever remain unchanged. But the expression of the unity of principle which pervades any science, has ever been met with censure by schools and colleges, who are not prompt to forgive those who make that comprehensible and intelligible, which they have themselves declared to be incomprehensible, and which they have also yet more greatly mystified: but the correction *to day* of the errors and ignorance of *yesterday* is man’s duty and his gain; and he who has the courage to *acknowledge* that he has learned a

new truth, and thereby corrected an old, and perhaps from long association, a treasured error,—such a man is truly heroic. To return to the consideration of yellow fever.

*Diagnosis* ;—The countenance presents a peculiar cadaverous appearance, particularly when the patient is at rest,—he looks much like a recent corpse, washed with an infusion of saffron ; his eye has a tinge of color about it, usually a delicate rose pink, but occasionally of a darker shade ; the tongue is soft, doughy, and swollen.

The accessions of yellow fever are usually most prominently marked upon the epigastric region, or on the brain. In post mortem examinations, when made upon subjects who lived but a short time after the development of the disease, the stomach will often be found to contain food, and medicines taken some days previous, retained therein unaltered by the digestive process.

In Philadelphia, post mortems usually presented the liver in a healthy state ; but in Mexico, during the late unhappy war with that country, the liver was found to be softened in texture, and of an orange or green color, while the gall bladder was distended with a viscid, black, tarry bile. But when the *head* symptoms were the most prominent, there existed after death effusions within the ventricles of the brain, whilst the brain was so much softened down as to be little more consistent than jelly.

**PREDISPOSING CAUSES.** Every thing which tends to the development of a preponderance of the electrical state. The use of Alcoholic drinks—great exertion or fatigue—a residence in districts commonly called malarious, as boggy and marshy grounds, more particularly near the sea coast, and these coincidents made yet more active by

a high temperature, which increases the evaporation—exposure to damp and cold, more especially when alternated with great elevation of temperature,—and finally, exposure to night air in such localities. Yellow fever is mainly limited to so called malarious localities near the sea coast. It is suppressed by cold weather, a fact which marks those modifications of disease called infections, whilst contagious diseases are not affected thereby. Contagious diseases originate at a given point, and spread therefrom as from a centre; but infectious diseases are marked by simultaneously attacking many persons, and at numerous points.

**TREATMENT.** On a supposed analogy between this disease, and poisonous effects produced by acrid substances, was based the following treatment: (1) Emetics of Ipecacuanaha—(2) Lenient evacuations by oil; (3) Oil of turpentine (an intermittent) in dram doses every hour or two, combined with some essential oil, and sometimes an ounce of Castor Oil. (Chapman and Henson.)

2nd mode.—Emetics, calomel, or emeto-cathartic of ipecac and calomel, of each grains five, every thirty minutes, until emesis and catharsis are induced; then quinine in large doses. (Prof. T. D. Mitchell.) 3d mode. To obtain free discharges from the bowels, liver, and kidneys:—

R. Hydrarg. Chlorid., Mit gr. xxx.  
Jalapi. Pulv. Comp., gr. xv. M.

Repeat in four hours if necessary. For the nausea and vomiting:—

R. Creasot. ol. gtt. xx.  
Ætheris Sulph., ℥ i. M.  
Spts. Lavend. Comp., ℥ i. M.

A teaspoonful every fifteen minutes until the nausea

and vomiting subside ; and three or four doses are generally sufficient. All liquids denied to the patient. Bleeding not in any case adopted, because he had seen its fatal effects in the Salamandrine Hospital, and at Vera Cruz. (B. Rush Mitchell.)

Of the preceding modes of treatment, we prefer that of Prof. Mitchell ; but none of them meet with our entire accordance. Calomel, in its action, is too depressing an agent to be employed in an Electrical form of disease, —the emetic, or the emeto-cathartic is appropriate ; but in lieu of the calomel, we would employ podophylline and irisine two grains each, with emetine gr. 1-8, repeated every thirty minutes until emesis and catharsis (remission) is obtained. We would then administer intermittents, as quinine and piperine, each five to ten grains, every two hours—and thereby endeavor to prevent the paroxysmal repetition. The nausea and vomiting may be frequently subdued by the administration of the following draught :

R. Quiniæ Sulph., gr. i.  
Ferri Mur. Tinct., gtt. xv.  
Aquæ Font., ℥ ss. M.

If the stomach rejects the first draught, it should be repeated in about fifteen minutes ; but we have seldom found more than one of the above draughts necessary.

If the depression is extreme, the quinine and piperine may be doubled, and the aromatic spts. of ammonia, in doses of thirty drops, may be given at intervals of about four hours. Sometimes hot brandy and water may be advantageously administered, especially during the intermittent periods, and immediately preceding the depression which marks the accession of another febrile paroxysm.

Says Dr. Madden, in narrating the treatment of yellow

fever in the East,—had the patients been bled, after the usual fashion, I think in all probability most would have died ; or had they survived they would have been left with debilitated constitutions, and a dropsical diathesis, to encounter in their convalescence. (*Madden's Constantinople.*) The practice pursued by Dr. Madden was *mainly* the administration of quinine, and prompt intermittents.

Captain Owen, of the British Royal Navy, who could not have any theory to upbuild, or any purpose of interest to subserve, in detailing the great mortality which took place among his people, while surveying on the coast of Africa, says : “ It may in fact be questioned, whether our very severe losses were not, in a measure, attributable to European medical practice, BLEEDING and CALOMEL *being decidedly the most DEADLY ENEMIES in a tropical climate.* During the whole time of the prevalence of the fever, we had not one instance of perfect recovery after a liberal application of the Lancet, or this medicine.” Captain O. himself had the fever, and recovered promptly, without either lancet or calomel, while the ship-doctor fell a martyr to his medical faith—he bled himself, took calomel, and died ! The preceding facts were published in 1840 ; they attest the mode of practice at that date generally prevalent in the service : but in 1842,—from a “ Report of the Select Committee on the Western Coast of Africa,” we read—amongst many other very surprising things—the following : “ The bleeding system has fortunately *gone out of fashion*, and the frightful mortality that attended its practice, is now no longer known on board our ships.”

Dr. Hosack, in 1798, thus wrote, “ A greater proportion of persons ill of this disease, were cured by means of castor oil and catnip, than by the more active prescrip-

tions employed by the physicians of the City." (New York.) The distinctive color of this fever is the *result* of permanent spasm of the gall ducts, as the color in *jaundice* is the *effect* of remittent spasms thereof. Hence the first and important indication must ever be to remove the cause of that spasmodic action. Towards that end, the simple means narrated by Hosack, were far more truly philosophical, than the heroic measures pursued by the learned gentlemen whose chief reliance was upon bleeding and calomel:—the almost "let alone" system was less fatal than the heroics of the schools.

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### SECTION III.

#### INTERMITTENT FEVER WITH LOCAL CUTICULAR MODIFICATIONS.

##### *1st Inoculation and Vaccinia.*

Before the process of vaccination became general, inoculation (the introduction of a minute portion of variolous—or small pox—matter beneath the cuticle) was practised, to mitigate the intensity of the disease, and to induce it in a milder form than when taken in the natural mode.

HISTORY. Its early history is obscure. It was indisputably and extensively adopted in Turkey at the beginning of the 18th century, from whence it was introduced into England, to meet the most determined opposition of the profession. Notwithstanding an Oxford graduate wrote to Dr. Woodward, of London, commending this new mode of superceding small pox, by the evolution of a milder development of the disease,—a communication and commendation published in the Transactions of the

Royal Society :—notwithstanding Surgeon Kennedy, two years later, bore similar testimony to the English people in a well written essay :—and, notwithstanding the Venetian Consul, at Smyrna, the following year noticed and described the process and its beneficial results,—yet these accumulated evidences produced no favorable impression upon the prejudices of the British Faculty.

Lady Mary Wortley Montague, wife of the English Ambassador at the Ottoman Porte, was “patriot enough to take pains to bring this useful invention into fashion in England,” by the adoption of the process upon the person of her daughter. From Lord Wharncliffe’s *Memoirs* of that eminent lady, we make the annexed extracts,—they convey proof of this terrible truth, that *persecution* ever has been, and ever will be, the only reward of the benefactors of the human race.

“Lady Mary protested (says his Lordship) that in the four or five years immediately succeeding her arrival at home, she seldom passed a day without repenting of her patriotic undertaking.” “That the four great physicians deputed by government to watch the progress of her daughter’s inoculation, betrayed not only such *incredulity* as to its success, but such an *unwillingness* to have it succeed, such an evident spirit of rancor and malignity, that she never cared to leave the child alone with them one second, lest it should in some secret way suffer from their interference.”

Such facts as these conclusively show that the discovery was not hailed by the profession, and at once adopted by its principal members,—indeed, the practice did not attain any general adoption by the faculty, until the middle of the century.



**VACCINATION.** That a bovine disorder, transferred to man, should protect him against the inception of small pox, is one of the most interesting and curious facts recorded in the history of medicine : but the fact is indisputable.

**HISTORY.** The peasants of a certain district in Gloucestershire, England, first recognised this great truth, and the results of their observations were gradually matured into a rational and scientific system, by the immortal Jenner,—a man who was imbued with the true spirit of philosophical investigation, and a close observer of nature ; to such men as Jenner and Newton, no fact, however small, is without value.

Whilst engaged in his professional duties, he learned from the peasants who were employed in the dairies of the district, that their hands were often attacked with an eruption which they had traced to a similar eruption on the udders of the cows they milked : and the belief had become general in Gloucestershire that no person who had had the Cow Pox, could take the Small Pox. But this truth, recognised by an illiterate peasantry, was decried by the sapient Faculty as a popular superstition, unworthy the attention of men of science and reputation ; and thus the Faculty again opposed the progress of medical improvement.

Dr. Jenner, however, who had a mind untrammelled by the authorities of the schools, determined to investigate the whole subject, which he soon found to be a great truth ; and in the face of the most determined professional and clerical opposition, he finally succeeded in establishing the practice of Vaccination, so called from vacca, a cow.

In common with every other improvement in medicine,

vaccination was received with ridicule and contempt ; and the Col. of Phys. and Surgeons became the medium of his most relentless persecution. Long after the benefits which his practice had conferred upon mankind were universally admitted, the pedantic arrogance of that most pedantic body, refused to grant him a license to practice his profession, in London,—because, with a proper feeling of self-respect, he refused to pass, at its hands, a school-boy examination in Latin and Greek. Even religion and the bible were made engines of attack against him ; and Errhman, of Frankfort, gravely attempted to prove from the prophecies, the writings of the Fathers of the primitive Church, and from the Apocalypse, that vaccination was the veritable Anti-Christ.

Such is the universal fate of benefactors of the race ; whilst living they are contemptuously denied bread, but after death their defamers give them a stone. (A monument.)

Though vaccination has almost wholly supplanted inoculation, yet it must remain incontrovertible that he who is inoculated is much better (seven times, says Mitchell) protected, than him who is vaccinated ; and it is also a fact that the inoculated have not the same fear of visiting and nursing those sick of small pox, which is found amongst those only vaccinated.

RE-VACCINATION is very generally recommended by authors and the profession, on the plea that the vaccine influence, or its protecting power, runs out,—or, that from successive changes in the development of the child, there arises an increased susceptibility.

The authors have never been able fully to reconcile these opinions, for the simple reason, that the vaccine disorder

is a true eruptive fever, partaking of the form, and submissive to the laws which mark the whole class: they seldom affect the individual but once, and leave the system intact against all future invasion of the disorders known as exanthematous.

The only plausible exposition of the fact under notice, is that derived from my friend and colleague, Dr. Kent, whose opinion may be thus expressed: The vaccine development is not indigenous or natural to man; it is to the bovine, what small pox is to the human—and hence it is never capable of fully permeating, and thereby permanently controlling the system, in the changes of its atoms which are constantly occurring. Hence its prophylactic power is gradually reduced, until, by the constant change of its atoms, it no longer remains influential in the system.

This view is strengthened from facts of almost daily occurrence;—thus re-vaccination may be attempted in any given case to-day, and fail—up to this time, therefore, the subject is safe from the inception of small pox. But a year or two hence, upon the same subject, re-vaccination is attempted and it succeeds—now that man would have been open to the invasion of small pox had he been exposed thereto.

Dr. Kent is further of opinion that the influence of vaccination is not permanent, like that of inoculation, because the bovine in its motor and sensor forces, is far below man in the scale of animal life. The dog is much more nearly related to man in the scale of motor and sensor force, and he thinks it is from this relation that the violence and intensity of transmitted hydrophobia arises. But the subject is one which demands the close attention of every intelligent and philosophical practitioner. In the

process of vaccination, attention should be had (1) to the general health of the child. (2) To the purity and freshness of the virus. Dependence should not be placed upon virus picked up anywhere—the history of every point or scab used should be distinctly traceable; and the health of the child and family through which it has passed, should be closely investigated. Recourse should be constantly had to the original source, for supplies. The use of the scab ought to be set aside,—the virus should be taken from the vesicle on the 8th day, on points of quill, carefully dried, and preserved in a blackened and air tight bottle.

CONCLUSIONS. Thus we have two modes of protecting the individual against the inception of variola,—Inoculation, and Vaccination, each of which possesses peculiar advantages. The former renders the individual “seven times” safer against ensuing attacks, (Mitchell,) but endangers the community by the risk of spreading the variolous impression.

The modification of disease produced by the insertion of the small pox virus, is mild, and *perfectly safe when due attention* is had to diet, the state of the bowels, the general health, and the avoidance of exposure to atmospheric changes. No instance of a single death, or other untoward circumstance occurred in my native locality, during the lengthened period in which inoculation was there practised; and no instance of a second attack could be recounted by the most aged. (Livezey.)

Those who have been subjected to small pox, by inoculation, express no fears, and evince no hesitancy in visiting, or nursing those who are attacked thereby; whilst but few, very few of those who are only vaccinated, can be induced to visit the small pox patient, except when

stern necessity demands it with an imperiousness which cannot be resisted.

From these conclusions, it is apparent, that whilst a sense of the greatest *security* demands inoculation—*prudence* dictates vaccination. If the subject could be sufficiently well guarded, so as to preclude the risk of the spread of the disease by contagion, inoculation would be chosen without hesitancy ; but as this result is not generally attainable, vaccination must be adopted. Under these circumstances, it is the duty of the physician to exercise the greatest circumspection ; 1st—over the quality of the virus employed,—and 2d, over all the conditions necessary to ensure the health and safety of the subject.

### *2d. Varicella, or Chicken Pox.*

Our main purpose in noticing this development of disease, is to contradistinguish it from small-pox, which, in its incipency, it much resembles ; hence its diagnosis is important, as it enables the physician to assure the mother of the safety of the child, and the non-varioid character of the case.

Varicella is contagious ; it is marked by an eruption of small, pointed, transparent, red vesicles, some of which become pustules :—these however are fewer than in small-pox, and run their course with far greater rapidity, terminating in about six days. The disturbance of the system is slight, and the eruption is preceded but by little fever.

The practitioner will meet with two varieties of varicella,—the *lenticularis*, already described, and the *globata*, in which the red points are quickly replaced by large round vesicles, containing a transparent fluid, which be-

comes opaque on the second day. The vesicles at their maturity are soft and flabby, and they are of a pearly white color.

As the vesicles are developed, they increase in size for two or three days, filling up with a milky fluid ;—on the fourth, they are encircled by a slight areola ; desiccation commences on the fifth, and terminates by the close of the sixth day, when small brownish scales alone remain, which fall off by the ninth or tenth day.

*Treatment.*—In most cases little is to be done by the physician, beyond attention to the bowels, and the regulation of the diet:—the room ought to be constantly ventilated, and the clothing frequently changed. Where there is much headache, and general febrile disturbance,—a nauseant or emetic may be administered, followed by chlorate of potassa, or quinine, with small doses of leptandrine.

### 3d. *Rubeola, or Measles.*

This well known disorder is contagious. It is marked by catarrhal symptoms, fever and eruption, which about the fourth day assumes a crimson cast, and is in the form of stigmatised dots, like flea bites, slightly elevated above the surface. These points coalesce into blotches of a horse-shoe or crescentic shape, leaving intermediate portions of the skin almost unchanged in color.

ORDER OF SYMPTOMS : 1st day. Alternations of shivering and heat, anxiety, lassitude, sense of pain and weight across the forehead, eyes, etc.

2d day. Eyes become red and watery ; catarrhal symptoms more marked, with hoarseness and cough.

3d. day. The catarrhal symptoms increasing ; eyes red or inflamed ; the cough frequent with dyspnœa ; fever, which abates about day-light or early morning ; and these remissions are followed by a repetition of the paroxysm in the afternoon.

4th day. As soon as the eruption is developed, the child becomes drowsy, awakening only to ask for drinks ; soon again relapsing into its drowsy state. Shortly after the eruption is fully developed, the redness of the eyes and the coryza disappear—the nausea and vomiting subside, and the only remaining symptoms are the cough and dyspnœa.

At the subsidence of the eruption, a diarrhœa usually appears ; and this fact is favorable for the patient if it does not become a source of debility.

When measles prevail as an epidemic, cases occur in which the eruption progresses through its usual stages ; but the disorder is not marked by the catarrhal symptoms, and is attended with little or no fever. Such cases should not be considered as genuine measles, but only as an abortive effort, and those subjected to this modification of rubeola, are liable to a second attack. It is well, on the occurrence of such cases, to administer prompt intermittents, until the system is thrown into the magnetic state, thereby endeavoring to make perfect the development of the disease.

The prognosis is rather unfavorable when the child is very young—when the eruption appears very early, or when it suddenly retrocedes. It is also less favorable when the eruption is either pale, or livid in color.

The *complications* are bronchitis, pneumonia, pleuritis, laryngitis, etc.; and its *sequelæ* are inflammation of the intestines, ophthalmia, etc.

**TREATMENT.** In a majority of cases, it is only necessary to advise a low diet, as milk, crackers, arrow root, etc.; the patient should be confined to the house, which should be of an agreeable temperature, and frequently ventilated; the clothing should be changed daily; the bowels kept regular by small doses of oil, rhubarb, or magnesia: exposure to changes of temperature should be avoided, on account of the danger of subjecting the child to broncho-pneumonia,—the main element of danger in this disease. No special efforts should be made to force out the eruption, under the mistaken notion, nay the dangerous fallacy, that the greater the eruption, the safer the child: on the contrary, the fact is, the less the eruption the milder the disease, and therefore the smaller the risk of dangerous and fatal results. The eruption may be taken as the gauge of the febrile disturbance, and, therefore, of the safety or the risk of the case. The drinks should be mucilaginous, but never heating or stimulating.

Should symptoms of croup or laryngitis arise, or if dyspnoea with pain and bronchial secretion is manifested, a prompt emetic may be administered, conjoined with the warm bath, and laxative enema, if indicated. As soon as remission has been obtained, the hydrocyanic acid, in suitable doses, with small portions of quinine will be found advantageous, and if there is restlessness or much nervous disturbance, morphine sulph., in doses adapted to the age of the child, may be combined therewith. If the cough at any time becomes dry and hacking, the following will be found useful :—

R. Belladonnæ Ext., gr. i.  
Hydrocyanici Acidi, gtt. iv.  
Syrup. Tolutani, ℥ ii. M.



Of the above, a child six years old may take a small teaspoonful occasionally.

During the paroxysmal period, the surface should be washed in tepid water, which may be slightly soured with vinegar.

CONVULSIONS will seldom be found as the coincident of measles, if the case is carefully and correctly treated. Should they occur, apply the cold douche to the head, until it is cooled, *not chilled*, and at the same time warmth and moisture to the extremities, or the hip bath (a tub of warm water, in which the child can sit so as to have the hips just covered) may be used.

If mucus effusion clogs the bronchial vessels, give emetine in nauseant or emetic doses, combined with small doses of carb. potassa, and follow with a dilute chloroformed atmosphere ; or small doses of hydrocyanic acid may be conjoined with morphine, to induce appropriate sedation, and to overcome the spasmodic tendency.

When the eruption suddenly retrocedes, resort should be had to the warm bath, which may be made slightly stimulating ; and this may be aided by friction, and sometimes by nauseants, or even a full emetic if required.

If ophthalmia should be developed, it will be usually complicated with a general debility of the system, (the Electrical state.) As a collyrium, the annexed is useful :

R. Zinci Sulph., gr. iv.  
 Aquæ Rosæ,  $\frac{3}{4}$  i.  
 Vin. Opii, gtt. xx. M.

And the following may be administered internally :—

R. Sulph. Quiniæ, gr. vi.  
 Ferri Phosphatis, gr. xii. M.

Divide into six powders, of which a child six years old may take three daily.

The cough so commonly remaining after an attack of measles, readily yields to slight counter-irritation, as the emplastr, roborans ; to naphtha in doses of 5 to 10 drops, combined with one to two drops of prussic acid ; the dose for an adult :—children should take proportionate doses—the syrup of emetine, with camphorated tinct. of opium in equal proportions may also be used, in many cases, with immediate relief. The use of small doses of gentle intermittents, should be continued for a few days after all symptoms of the disease have disappeared.

#### *4th. Scarlatina, or Scarlet Fever.*

Scarlatina is a contagious eruptive modification of intermittent fever, epidemic, and affecting the system usually but once.

The eruption is preceded by febrile disturbance ; on the the second day a scarlet rash appears, which ends from the fifth to the seventh day, and is followed by cuticular desquamation more or less perfect.

Scarlatina is recognised by four terminals :—Scar. Simplex, Scar. anginosa, Scar. sine exanthemata, and Scar. maligna ; but these varieties are only modifications, manifesting an excess of some special symptom or symptoms, and will oftentimes all be found in the same family during its epidemic invasion.

#### *Prominent Symptoms,*

*1st. Scar. Simplex.* General indisposition for twenty-four, or forty-eight hours. In some cases the child is sent

to school in the morning, and there has an attack of nausea and vomiting, followed in a few hours by swelling of the face and the manifestation of the rash. The paroxysms, marked by increased pulse, higher color, and great heat of skin, with thirst, are found at night, followed by an early morning remission. The throat is sometimes sore, and occasionally there is slight cough.

*2d. Scar. Anginosa.* In this modification, the affection of the fauces is the most prominently marked symptom: there is early pain in swallowing,—the voice is huskey or hoarse,—the velum, etc., swollen, as well as the glands of the neck and jaws. Respiration oppressed. The appearance of the tongue is peculiar; it is florid in color, and dotted by the papilla, elevated,—the color, and the papillary elevation, give to the tongue an appearance much like a ripe strawberry—and it is hence commonly known as “the strawberry tongue of scarlatina.” The remissions are well marked in the morning, and the paroxysmal accessions are equally distinct in the evening.

*3d. Scar. sine exanthemata.*—Although in this modification of Scarlatina all the prominent symptoms are found which characterise the Scar. Anginosa, there is yet no visible eruption. But the distinctive tongue designates the disease,—what then has become of the characteristic eruption? Is it not developed upon the internal surface, by an inversion of the functional condition of the cuticle? In dropsy, the functions of the skin are suspended and the fluids usually thereby eliminated, are driven back upon the tissues—there is an inversion of functional action. And may not the absence of the rash, in the case under consideration, be solved upon the same mode of reasoning?

The increased abdominal irritation in those cases, certainly strengthens these views.

4th. *Scar. Maligna*.—Eruption irregular,—eyes dull and heavy,—the tongue loses its distinctive character, and is covered with a thick brown crust, there is often coma, and frequently convulsions.

In some malignant epidemics the head is chiefly affected. The child may be put to bed apparently well, but in a few hours is found convulsed, or vomiting and purging,—sometimes in deep coma ; there is also a dark red eruption, etc. The *S. malig.* presents a marked preponderance of the electrical state.

SEQUELÆ.—The sequelæ are anasarca, ophthalmia, otitis, bronchitis, enteritis ; and in children, affections of the sub-maxillary and inguinal glands. The sequelæ of Scarlatina attest the general depression of the system,—they are usually preceded by exposure to cold and moisture at too early a period after the cuticular desquamation.

DIAGNOSIS.—*Scar.* may be reasonably diagnosticated, when the pulse is rapid, the skin hot, the fauces red, with some nausea and vomiting,—and from its prevalence in the locality of the patient.

TREATMENT.—In *S. Simplex*, if there is much oppression, a few grains of ipecac, may be given to act as an emetic ; or smaller doses of ipecac or emetine, as a nauseant and diaphoretic : laxatives or clyster if the bowels are constipated. Should the surface be very hot, dry, and burning, tepid or cool spongings may be advantageously employed ; or the wet sheet, in more urgent cases. As soon as remission has been attained, chlorate of potass ʒ ss, dissolved in a tumbler of cold water, may be given in table-spoonful doses : and throughout the period of

intermission, the following mixture may be administered to a child of the age of two years.

R. Quiniæ Sulph. gr. x.  
Syrupi Simpl.,  $\frac{3}{4}$  i.  
Acidi Sulph. Arom., gtt. xx. M.

Of the above, a tea-spoonful may be given every two hours; thus averting paroxysmal repetitions, and guarding against the access of the severer forms of the disease.

In *S. Anginosa*,—emetics of emetine or lobelia are important, frequently rendering the disease mild in its subsequent course. During the febrile paroxysm, give the following, a tea spoonful every 7 to 10 minutes, until nausea and perspiration, or vomiting is produced.

R. Emetine gr. i.  
Aquæ,  $\frac{3}{4}$  i. M., et ft. solutionem.

Remission obtained, give the acidulated quinine syrup,—or a solution of the chlorate of potass. with a few drops of muriatic acid:—or hydrocyanic acid may be added to the quinine syrup, in the proportion of one drop to the dose.

For the throat—externally—diluted iodine tinct.; or the ung. hydrag. biniodidi; where ulcerated, nitrate of silver, eight grains, to water two drs., applied with a camel's hair pencil, and a drink of dilute sulph. or mur. acid, sweetened, (as lemonade) may be used for its astringent influence. The surface should be frequently sponged with tepid water, slightly acidulated with acetic acid, to allay restlessness, itching, etc.; if the heat of the skin be excessive, cold sponging will be admissible. If the restlessness is great, the following may be of advantage.

R. Hydrocyanici Acidi, gtt. v.  
Morph. Sulph., gr. ss.  
Belladon. Tinct., gtt. xviii.  
Aquæ. Coch. min., ix. M.



Dose for a child two years old, a teaspoonful every two or three hours.

When the tongue clears, and the active symptoms are in subsidence, the use of turpentine, diffused in gum mucilage, with the addition of from five to ten drops of sweet nitre, may be usefully employed to increase the renal secretions, and thereby guard against the dropsical manifestation.

Where the depression, (the electrical state,) is marked, add to the sedative solution, (above) 1 to 3 grains of quinine with each dose; Madeira wine, or brandy, may be added to the beverages; and capsicum may be conjoined if the prostration is great. For this stage—the annexed is a good combination:

R. Quin. Sulph., gr. ss.  
Piperin, gr. i.  
Ferri Phosphat., gr. ii. M.

This powder may be repeated at intervals of from one to three hours, until marked change of state is attained.

In cases marked by cerebral disturbance, NEVER bleed, nor give tartar emetic; nauseants, cold to the head, and stimulating pediluvia will be all sufficient.

The *cold water treatment* is not admissable in cases characterised by great depression, reduction of temperature, oppressive breathing, low delirium, etc., all evidences of the electrical state; but it may be of advantage in cases where the magnetic state is preponderant, as when the skin is permanently hot and dry, with head-ache, thirst, etc.

In *S. maligna*, the treatment, must be more promptly intermittent and sustaining.

During convalescence, or when the cuticle begins to fall

off, the warm or tepid bath, with friction to the surface, at night, will be of advantage ; and the continuance of some intermittent combination is advisable for some days after the entire subsidence of the disease.

### 5th. *Erysipelas, or St. Anthony's Fire.*

This modification of intermittent fever, commences with a fit of shivering, fever, nausea, and vomiting, alternating with rigors, etc. ; followed by the manifestation of a small pink or red spot, painful and tender to the touch, and usually first seen on the nose, ear, cheek, or near the cheek. The nucleus, or spot, gradually spreads, exhibiting as it advances, an irregular, abrupt, and elevated margin, which is attended by a burning, pricking, and smarting pain.

Throughout the whole progress of the disorder, there is marked constitutional disturbance, and the paroxysms and remissions are distinctly seen.

VARIETIES. Nosologists have made the following subdivisions ;—*Simplex*,—*erraticum*,—*edematodes*, when attended with great swelling and effusion of serum,—*phlegmonides*, when extreme tension, hardness, and suppuration occurs at various points.

COMPLICATIONS. The local development not unfrequently, if badly treated, extends down the esophagus to the stomach, or through the ramifications of the bronchial tubes, giving rise to intense heat, abdominal distress, and oppressive breathing.

EXCITING CAUSES. Vicissitudes of temperature, exposure to cold, predisposition excited by habits of intemperance, and all other causes of constitutional depravity.

**TREATMENT.** Avoid blood letting in all its forms, and all other depletive means,—resort to depletion induces the typhoid form so much dreaded, and so frequently induced by the treatment of the “old school.” All modes of depletion but aggravate the symptoms—hence it is worse than useless to bleed, cup, purge with calomel, salts, to blister, or to exhibit antimony, nitre, etc., before resorting to the use of prompt intermittent and anti-periodic remedies.

Dr. Elliotson says, he “has never seen *bark* do harm, even in active tonic erysipelas, and in doubtful cases it is always a safe and eligible medicine.”

Dr. Fordyce administered *bark* with the most pleasing success, in the several modifications of this disorder.

Dr. Dickson shows, by numerous quotations from medical authors, that in this disease, the phases of the type of all disease are distinctly seen; indeed few disorders are more prominently marked by paroxysm and remission: hence intermittents are the only true curative agencies.

The “old school” practitioners have no idea of arresting the paroxysmal repetitions, and thereby preventing the perpetuation of the disease from day to day; and yet erysipelas, in common with every modification of fever, may be cut short at once, by the exhibition, during the paroxysmal period, of emetine as a nauseant, or emetic; and remission attained, the further progress of the disease may be promptly arrested by the administration of quinine, or some other intermittent, alone, or in combination.

**LOCAL APPLICATIONS.** Collodion, creasote, tinct. iodine, or nitrate of silver (in solution) to blacken the surface—these may be occasionally useful; but the most available application is a poultice of upland cranberries; and where



these are not attainable, a poultice of baked apples, to which a little dilute acetic acid has been added, will be found very serviceable. External means will be rarely demanded, where the treatment is prompt, and due attention is had to the paroxysmal phases.

*E. Chronicum.* Erysipelas not unfrequently becomes chronic, and its paroxysms are repeated once, twice, or more frequently each year; but in this chronic form, the periodicity of its development is beautifully marked. The ears, nose, eyelids, etc., are the parts most commonly affected.

**TREATMENT.** If the stomach indicates a disordered state, a prompt emetic of ipecac, or emetine may be administered; which may be followed up by full doses of quinine and hydrocyanic acid, or quinine and morphine; or Fowler's solution, in doses of from two to ten drops, three times daily, will often be found of much advantage. These means should be continued for some time after the symptoms have wholly disappeared; thereby overcoming that tendency to *habitual* repetition which is the basis of all chronic diseases.

The *modus medendi* of this treatment is predicated upon the fact, that this, and all similar modes of disorder, are but modifications of remittent fever, itself only a modification of intermittent fever.

#### 6th. Variola,—or Small Pox.

This modification of disorder is contagious and eruptive. Its cutaneous manifestation is usually seen about the third day of the febrile invasion, and is first papular—then vesicular, and finally pustular. About the fifteenth day, the

pustules desiccate and scab over, leaving behind them, as they become detached "cicatrices" or "pocks."

Variola is recognized under two forms, the distinct and the confluent: the former is marked by the isolation of the pustules, the latter by their coalescence. Small Pox is also marked by three distinct stages; the *febrile* or period of invasion, lasting from two to four days; the *eruptive*, in duration eight days, and the desiccating and declining, occupying four to five days more.

PREMONITORY and General Symptoms.—The disease usually commences with rigors, followed by heat of skin, thirst, often nausea and vomiting, headache, and *violent pain in the small of the back*.

"A tendency to perspiration is sometimes (always?) observable." The fever is often (always?) decidedly remittent, with daily exacerbations." "The fever which has resulted upon (or rather developed) the occurrence of the eruption, but has never entirely left the patient, increases again on the eighth or tenth day; and the new accession is often (always?) marked by the occurrence of rigors" (*Wood*).

DIAGNOSIS.—Severe pain in the lumbar region, excessive irritability of the stomach, ascribable to no noxious cause,—the prevalence of the disease,—a papular eruption manifested on the third or fourth day, with a subsidence of the fever,—the eruption becoming vesicular, with an umbilicated summit,—all these symptoms would afford good evidence of the presence of variolous disorder.

HISTORY AND ORIGIN.—The records of the earliest manifestation of small pox are lost in the vista of the past. It was present at the siege of Mecca, in Arabia, in

the year 572, but from whence it came we are not informed. It entered Europe during the eighth century. Its first recorded appearance in the Western Hemisphere, was at St. Domingo, in the year 1517; and later, a negro covered with small pox pustules was landed upon the Mexican coast, and therefrom it is supposed that three and a half millions of persons perished. (*Robespierre*). From that time its visits have been almost annual.

From whence came the disease at the siege of Mecca? How is it, if the disease be rankly contagious, that a district may be ravished by the disease, and yet die out, though children are being born there all the while?—(*Duncan's Med. Comment.*)

How did the two convicts in the Eastern Penitentiary, (Philad.) who had been confined therein fourteen years, get the disease, secluded as they were, and debarred from all intercourse with the world without (*Medical Exam.*) Whence came the disease to the helpless idiot in the lunatic asylum near Lexington, in the year 1840, who had not a known friend or relative on earth, who was confined to the third story, and had for three years been there retained, whilst not a solitary case of the small pox was known in or about the town?—(*Prof. T. D. Mitchell.*)

These, and many similar instances prove, that although small pox is contagious, it must also arise *de novo*, as all diseases must in the course of time have arisen.

It is usually maintained that this disease attacks the system but once, yet cases of its second invasion are indisputable, as those already marked with the small pox have been known to take the disease a second time.

**SUSCEPTIBILITY.** The human body is not always equally susceptible to the impression, or open to the inception of

small pox,—a remark which is applicable to every other manifestation of disease. An individual may be exposed to small pox in its most malignant and epidemic form, and wholly escape its inception; nay, he may pass unscathed through several such epidemics, and at last fall a victim to the disease, by exposure to a single sporadic case.

As in measles, the foetus in utero may be subjected to the disease in its most severe and malignant form,—there are cases on record amply sufficient to make the fact indisputable.

**PRINCIPLES OF TREATMENT.** In mild cases but little need be done beyond attention to diet, the condition of the bowels, and the avoidance of exposure to atmospheric influences. The room of the patient should be freely ventilated, and the atmosphere slightly charged with chlorine.

In more severe cases nauseants or emetics will be indicated, to mitigate the febrile paroxysm, and to relieve the bronchial oppression. Castor oil or enemata may be demanded to obviate constipation, and to remove morbid accumulations.

The distressing headache may be relieved by enema of cold water, hot pediluvia, rendered stimulating by the addition of wood-ashes, mustard, etc., or sinapisms may also be applied to the calves of the legs, and cold to the head—but that should not be continued long enough to depress the brain's functions.

Warm spongings, by softening and cleansing the skin, will often have the effect of moderating the febrile intensity, and are not attended with the risks incident to cold water applications during the high febrile paroxysms.

During the periods of remission, more particularly when

the intensity of the febrile exacerbations have been subdued, and the electrical state is becoming more predominant, quinine, in some of its combinations already noticed, will be found of the utmost advantage. Bread, toasted, and dipped in wine and water, or in brandy and water, is also grateful to the patient, and admissible where there is a tendency to prostration, with poor appetite. As convalescence progresses, the diet should be more nutritious and sustaining.

The exclusion of the atmosphere from the eruption, more particularly during the period of its desiccation, should not be neglected, and for this purpose the following preparation may be employed,—Roasted flour, two table spoonsful, pulv. calamine 2 drs., well mixed, and dusted on the eruption through a piece of fine gauze. Collodion, or the isinglass plaster may also be used for the same indication.

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#### SECTION IV.

##### INTERMITTENT FEVER, WITH CEREBRAL MODIFICATIONS.

The several phases of disease to be considered in this section, will upon examination be found to present those characteristics of the unity of all disease, Periodicity and Intermittency, which mark every manifestation of disordered action. Those characteristics of the primal type may be modified, and in rare instances almost obscured; yet their existence will always be found more or less distinctly traceable; indeed all sound practice is based upon the observance and practical recognition thereof.

Yet although observed by authors and practitioners it is

lamentable to witness the results of that practice which utterly disregards, or passes by as valueless, those efforts, marked by intermission, whereby nature attempts to overcome the constitutional disturbance, and to restore health.

We shall prove that all the cerebral modifications of disease, coming appropriately under this section, are characterised by that bond which proclaims the identity or unity of all morbid action ; and in most instances our proof will be adduced from the written admissions of the “ old schools;” admissions, however, never made until recently, and not for years after our doctrines had been announced by the great Dickson.

### 1st. *Mania-a-Potu.*

This disorder is also called, improperly, *delirium tremens*, because delirium cannot tremble ; hence *delirium cum tremore* would be a more appropriate designation.

This disease, in many of its symptoms, resembles inflammation of the brain in its incipient stage ; and not unfrequently, from this erroneous diagnosis, it is most unfortunately treated by depletory measures.

The cause of *Mania-a-Potu* can be alone found in the suddenly suspended use of alcoholic drinks, whereby the brain becomes subjected to great disorder, in consequence of the lack of its accustomed stimulus. *Delirium tremens* may arise from other causes, to wit:—in the course of the so called idiopathic fevers, after great loss of blood—after active inflammation of the brain, from long continued exposure to lead,—and from the habitual use of opium, (or its preparations) tobacco, etc., etc.

**SYMPTOMS.** Constant wakefulness, with continued de-

lirious talking—ceaseless endeavors to get out of bed, to escape from the room, and frequently to jump from the window, but easily induced again to lie down or to return to bed. The hands and arms are moved backwards and forwards, but not violently. Wrongs are imagined, injuries apprehended, or pecuniary embarrassments feared. Repulsive, frightful, and horrible spectres are seen, from whose approach he endeavors to escape, and with whom he despairingly struggles. The tongue, in common with the body, is tremulous; there is subsultus tendinum, picking of the bed clothes, etc.

This disorder is readily contra-distinguished from Phrenitis, (inflammation of the brain) by the softness of the pulse, the absence of all violence, the flushed face, reddened eye, and furious delirium; by the creamy mucus surface of the tongue, and the presence of a copious perspiration.

THE PROGNOSIS may be deemed favorable, except in persons of a worn out and diseased habit, and much addicted to the use of spirituous liquors, or where the system has been exposed to frequent attacks of the disease.

TREATMENT.—Early in the attack, the further progress of the disease may be arrested by a full emetic, followed by a *hot* infusion of ginger, valerian, and columbo. Sleep may be induced by chloroform; quinine in doses of three grains, to which morphine in 1-4 gr. doses is added, may be given every two or three hours; or the morphine may be omitted, and the following pill administered, alternating with the quinine:—

R. Camphoræ Pulv., gr. ii.,  
Hyoscaine Ext., gr. i.,  
Opii. Pulv., gr. 1-4, M. et ft Pil.

To overcome the depression which is sometimes found, and to supply some stimulus in place of those which have been suspended, a strong infusion of capsicum may be occasionally administered.

Do not mistake this disorder for inflammation of the brain, or meningitis; avoid the use of the lancet, leeches, or cupping, and regulate the bowels by small doses of lepodrine, or enema.

As soon as the appetite returns, let the diet be nutritious and sustaining,—but whilst the intensity of the disturbance continues, it should be light, and easy of digestion. The body should be daily cleansed by warm sponging, followed by cold water affusion, and friction; and sleep may be promoted by hydrocyanic acid in two or three drop doses, given at intervals of about four hours.

The annexed case is of interest from the many points of similarity it presents to the disorder under notice;—proving that the cerebral disturbance which marks delirium tremens, may arise from other sources than the use of alcoholic drinks.

W. N., aged 55; a robust, plethoric man, of temperate habits, complained daily at 8, P. M., of strange feelings of fear, accompanied with horrible forms as of persons, who were attempting his injury.

Under this hallucination, he would spring out of bed in the greatest consternation and tremor; but was readily led back thereto by his attendants. After the lapse of some hours, composure returned, followed by sleep; and during the day he was able to pursue his occupation—lime burning.

He was ordered to take sulph. quin., grs. x., with hydrocyanic acid, gtt. iv., at 7 o'clock, P. M.; the effect of



the anti-periodic was at once to make an end of his periodic attack, and all its annoying attendants.

Six years previously he had a similar attack, and was subjected to a routine of allopathic depletion by cups, purgatives, etc., the treatment was continued for several weeks without improving the case ; but upon the administration of so called "tonics" and "nervines," he rapidly recovered his health, and the cerebral disturbance ceased.

## *2d. Hydrocephalus, or Water on the Brain.*

This disorder is peculiar to infancy or early childhood, and preceded by a gradual development of the electrical state. We shall analyse the disease in its successive stages and symptoms.

**1st. PRODROMIC.** Change of temper, variable or defective appetite, offensive breath, vitiated alvine discharges: the child is easily fatigued, its sleep is heavy and prolonged, or in broken and disturbed slumbers, being awakened by darting pains through the head; tenderness of scalp, stiffness of neck and jaws, an almost constant frown, etc., but the child yet remains about, and attempts its usual sports.

**2d. ACCESSION.** Heat and pain in the head, frequent and hard pulse, extreme restlessness, morbid vigilance; the child wakes up affrighted, or in pain; dislikes questions; tongue white, stomach irritable, urine scanty and of deep color; abdomen changes from tumid to the flaccid state.

**3d. DECLINATION, by effusion.** Irregular pulse, often very slow; somnolency, coma, squinting, the child looks

upward without winking, sees double, hearing affected ; the hands are placed on the ears and head, with a fiddling motion of the arms ; subsultus, coma and convulsions.

4th. COMPRESSION, accompanying effusion. The feebleness and slowness of pulse increases, with failure of all the functions ; and yet the child may lay for days or weeks, an almost living corpse, apparently pulseless, cold, and cadaverous, the repeated convulsions being almost the only evidence of remaining life.

To illustrate the philosophy of the treatment we propose to describe, we ask the reader's attention to the annexed authoritative admissions.

In this disease, says Prof. Wood, "the paroxysms of vomiting and the pain in the head *disappear* and *return* daily, or two or three times a day, for several days,"—in others, it "begins with chilliness or rigors, followed by fever," or there may be "*occasional* attacks of headache, with or without vomiting, the *spells* occurring at regular or irregular intervals,—sometimes at a *certain hour* every day or every other day, with apparent good health between them." Thus the learned Prof. proves for us the intermittent and periodic nature of the disease.

The great Dr. Watson, of London, says, of the second stage, that it "may last a week or two ; and what is remarkable, it is often (always, author) attended with *remissions*, sometimes sudden, and sometimes gradual," thus also acknowledging the intermittency and periodicity of the disorder.

But of what value to the learned doctor, or of what advantage to the little sufferer are these heaven sent remissions ? Let Dr. Watson answer for himself thus, they are "*deceitful* appearances of amendment, and even of con-

valescence. The child *regains* the use of its senses, recognising those about him again; but in *a day or two relapses* into a state of deeper coma than before. And these *fallacious* symptoms of improvement may occur more than once."

What are the predisposing causes of this disease, and amongst what class of children is it most commonly found? The authorities are in unity with Prof. Wood, who says, "children are certainly born not only with a general tubercular diathesis, but also with a particular tendency to this disease, as proved by the fact, that in some families almost all the children die with it."

Such being the case, is it not most surprising that these learned authorities should recommend "general and local bleeding, active purging with calomel and suitable adjuncts, cold to the head, revulsion by means of a blister over the scalp, and the introduction of mercury into the system both internally, and through inunction upon the inside of the limbs, and applied to a blistered surface, so as to produce its constitutional impression;" such is the authoritative treatment, those the "remedies (?) to be employed.

When such a system of treatment is adopted, is it surprising that in "some families almost all the children die with it?" need it excite wonder that Dr. Rhytt should declare "he had never cured one of his patients,"—that Dr. Eberle should say "instances of recovery are exceedingly few,"—and that Dr. Watson (of London) in his summary of 76 cases, reports but 19 cured, or more truly but nineteen escapes from an almost universal death. In the treatment of 76 cases, but one in four lived!! Well may Surgeon Cooke, of the Royal Free Hospital of Lon-

don, describe the results of the "regular" treatment of Hydrocephalus as one of "routine slaughter."

TREATMENT.—In the incipency of the disease, the bowels should be cleared from the offensive secretions, by leptandrine, combined with small portions of podophylline, or by leptandrine and irisine : after which quinine in doses of from 1·2 gr. to a grain, 3 to 4 times daily, combined with small doses of podophylline. (1·24 to 1·16 gr.)

If the countenance is pale (anemic) the several preparations of iron may be advantageously employed, of which the phosphate is the most generally useful—combined with quinine,—and the podophylline may be added or omitted, as indicated by the state of the alimentary canal. Keep the head cool, and the extremities warm.

If the child is first found in the second stage, emetine in minute doses, will be demanded every five minutes, until the pulse is softened and reduced, and the skin relaxed ; at the same time cold should be applied to the head, and stimulating baths or poultices to the feet. By the employment of these, and other incidental means, the forces are equalised and remission attained. As soon as the skin has become warm and in a perspirable state, give

R. Quiniæ Sulph., gr. i.  
Hydrocyanici Acidi, gtt. i.  
Aquæ, or Syrupi, q. s.

The above may be repeated at intervals of from two to four hours.

Should the patient be first seen in the third stage (a condition it ought never to be allowed to reach) the physician must endeavor to arouse the system by the administration of piperine or capsicum, with quinine ; brandy and water, given hot, and as strong as can be borne, may

be freely administered, until reaction is secured, and in some cases enema of capsicum and valerian, or of brandy and water and quinine may be conjoined.

For the varied phases of this disease, as in intermittent, the following has been found very advantageous :—

R. Iodini, gr. ss.  
 Potassæ Iodidi, gr. i.  
 Cantharid. Tinct., gtt. xxx.  
 Aquæ Font., ℥ xii. M.

A child 12 months of age may take half a teaspoonful (℥ ss.) of the above, three times daily—at two years old the dose may be two scruples, and at 3 years, ℥ i., or a full teaspoonful may be given. During the prodromic period, the above solution may be most advantageously employed, given an hour after meals; and the child should wear flannel, buck-skin, or silk wrappers, thereby maintaining the temperature of the surface, and preventing that loss of vital magnetism which so strongly marks this phase of disease.

### *3d. Meningitis and Phrenitis.*

Between these two (so called) diseases, there are no symptoms by which they can be individually diagnosticated, and was that result possible, it would be valueless in the treatment of the case. In a majority of instances, doubtless both the membranes and the external portions of the cerebral mass (at least) participate in the disordered action.

**SYMPTOMS.** *1st. stage—Accession* :—Magnetic state predominating. More or less depression precedes the febrile phenomena, which mark the magnetic determination to the brain. The brainial affection is marked by intense headache, redness of the face, suffusion of the

eyes, with an expression of wildness ; giddiness, super-sensitiveness to light and sound ; pupils contracted when exposed to light ; extreme restlessness and absence of sleep, soon followed by more or less violent delirium. The pulse is frequent, hard, irregular or tumultuous. The tongue is covered with a whitish fur, and the accession is frequently marked by much and continued vomiting.

*2d Stage—Depression*—The electrical state becoming predominant. After the lapse of a week or ten days, the delirium yields to drowsiness or stupor ; the pupils dilate ; sight and hearing are impaired • sensibility of skin much diminished ; liquids lie in the mouth unswallowed. Rigidity of muscle, and contraction of one or more of the limbs are apt to take the place of the general convulsive movements. The pulse becomes slow and intermittent, and the respiration is attended with frequent and deep sighings.

*3d Stage—Increased Depression*—The electrical state predominant. Signs of great prostration are next added to those of oppression ; the muscular contractions yield to partial palsy, the pulse is feeble and thread-like, skin bathed in cold sweat ; features sunken and haggard ; involuntary discharges—and the patient dies in a state of profound insensibility.

IN TUBERCULAR MENINGITIS, the patient may again and again fall into a deep stupor, continuing from twelve to twenty-four hours,—doubtlessly caused by pressure of the swollen tubercles, which when they soften and break, relieve the brain, and thereby restore the patient to consciousness, as the pus is diffused through its substance, a result which may be repeated from time to time in the progress of the case.

CAUSES AND TREATMENT.—This disease being “not uncommon in new-born infants, and in those under two years,” and inasmuch as “caries of the bones of the ear, and of the cranium itself,” are amongst the “frequent causes of it, which are deserving of particular attention,” we cannot concur with Dr. Wood, when, in the face of these existing causes, he says that “beyond all comparison the most effectual remedy is bleeding.” We would also dispense with the application of cups to the temples, behind the ears, or neck, as well as leeches to the same parts, even though “skillfully applied;” for meningitis not unfrequently occurs in the course of “febrile diseases, especially typhoid fever, and erysipelas, and it is also a frequent sequela of scarlatina.”—(*Wood.*) Surely, in all such cases, more good can be effected (without permanently and injuriously depressing the patient) by nauseant doses of emetine, and full doses, 3 to 4 grs., of podophylline, aided, if required, by cold to the head, warmth and moisture to the lower extremities—and the employment of lobelia enemata as derivative and relaxants;—as soon as perspiration marks the change which precedes a remission, more or less perfect, recourse should be had to sedative intermittents,—as

R. Hydrocyanici Acidi, gtt. viii.  
 Quinæ Sulph., gr. xv i.  
 Acid Sulph. aromat, gtt. xv,  
 Aquæ, ℥ ii, M.

Of the above, a child two years old may take a tea spoonful every two or three hours; and the quinine may be gradually increased in quantity. The following is also a good form of combination.

R. Quinæ Sulph., grs. xvi.  
 Podophylline, gr. ii.  
 Zinci Sulph., grs. iv, M.  
 Div. in Pulv., No. xvi.

Of which one may be given every 2 to 3 hours, alternating with the following mixture, in tea spoonful doses.

R. Hydrocyanici Acidi, gtt. viii.  
Ext. Hyosciami Nig., gr. viii.  
Aquæ, ℥ ii, M.

Let the utmost attention be paid to the changing temperature of the patient, for what is the bugbear, *inflammation*, but a quicker motion of the atoms, and consequently a higher temperature of the part where atomic motion is thus changed?—and it must be admitted that both may be subdued by cold and sedative remittents. Remission attained, the intermission is to be prolonged and maintained, until the changed direction of the motor and sensor forces, and their normal equilibrium eventuates in the establishment of health.

#### 4th. *Epilepsy,—Falling Sickness.*

This disease has been also nosologically designated *morbus sputa*; but it is more popularly known as Falling Sickness.

The word Epilepsy is derived from the Greek *επιλαμβάνω*, to seize upon; the disease being marked by a “sudden” paroxysmal attack of convulsions, with loss of sensibility, without fever,” which passes off by a deep sleep.

The patient is at once struck down, as by a sudden blow, and seized with general convulsions. The features are drawn aside, or fixed; the tongue, which is thrust out of the mouth, is often badly injured, by the lateral grinding of the jaws; in short, the senses are suspended, and the subject paralysed.

During the fit, a foam, intimately commingled with



bubbles of air, issues from the mouth ; and it is frequently mixed with blood, arising from the injuries received by the tongue. After the lapse of a longer or shorter period (usually from 1 to 15 minutes) consciousness is gradually restored, and the patient looks around with a vacant or stupefied gaze,—one of the marked characters of the disorder.

Epilepsy is not always marked by all these distinctive features : sometimes there may be loss of consciousness, with little or no convulsions ; and in some cases, the patient only falls down in a state of momentary insensibility, from which immediately rallying, he again springs to his feet, and pursues his course as though nothing serious had occurred. In other cases, the insensibility may not be complete, and yet the convulsions are severe. But all these varied phases are only modifications of the disorder, manifesting the degree of the intensity of the attack, and the many forms it may sometimes assume.

**PREDISPOSING CAUSES.**—A gradual loss of equilibrium between the motor and sensor forces, and a preponderance of the electrical state, marked by increased and vitiated secretions.

**EXCITING CAUSES.**—Irritation of the stomach and alimentary canal, teething, worms, retrocession of cutaneous eruptions, suppression of the catamenia, and of hemorrhoidal and other fluxes, fright, terror, or other excessive passion. Pressure on the brain produced by a blow, or other external injury, and the contact of a spicula of bone, are also amongst the exciting causes.

**NATURE OF LOCALISM.**—All the symptoms point to the brain as being the localism of the disorder. Even when originating from some point of irritation, either spinal, or

in the stomach, bowels, or uterus, still the prime effect is wholly dependent upon cerebral disturbance.

**TREATMENT.**—At the commencement of the attack, loosen all the garments; save the tongue, and by cautious restraint of muscular movements, keep the patient from self-injury. Endeavor to find the cerebro-spinal source of irritation, and promptly obviate or remove it. If the face is pale, treat as for ordinary faint; apply ammonia to the nostrils, and dash cold water on the face. If red and turgid, pour cold water on the face, and apply the douche to the head,—and whenever practicable, promptly administer an emetic.

All that Dr. Wood says about fulness and emptiness, plethora and anemia, is mere nonsense: he mistakes effects for causes. Where was the plethora ten minutes before the fit? and ten minutes after the paroxysm, what has become of the emptiness?

Sudden fright has caused and cured epilepsy, and the same is true of the other passions, when in excess. When thus influenced, where are the causes so emphatically noticed by the learned Dr. Wood?

During the period of intermission, intermittent remedies should be administered in sufficient doses, and often enough repeated, to induce a marked change in the state of the patient. Amongst the most generally available remedies for this indication, are Fowler's solution, and the nitrate of silver; quinine and strychnine are also beneficially employed, combined with small doses of podophylline, if the bowels are sluggish. Dickson says "there is no remedy equal to nitrate of silver, in what are called purely nervous complaints." The valerinate of zinc is also a useful remedy.

In children, attention should be paid to the gums, if teething, and if swollen and painful they should be freely scarified. Acidity of the stomach and gastric irritation demand appropriate symptomatic remedies; and where worms are suspected, anthelmintics should be administered, amongst which common salt—two teaspoonsful per dose—and oil of chenopodium are of essential service.

Finally, the improvement of the general health of the patient, and the correction or reproduction of excessive, or suspended secretions, is the main object to be attained. In females, where the uterine secretion is deficient or suspended, the preparations of iron are indicated, to which may be conjoined cantharides, strychnine, etc., in appropriate doses; and much benefit will be found from a change of employment, locality, etc.

#### *5th. Apoplexy.*

When a person falls down suddenly, and lies without sense or motion—pulsation and breathing alone continuing, he is said to be suffering under an attack of apoplexy; or in common parlance is an apoplectic fit,—during the persistence of which he is unmoved by anything transpiring around him,—neither the cries and lamentations of relatives and friends, wife or children are noticed: he lays oblivious as a breathing corpse, which indeed he most resembles.

The breathing is peculiar, and characteristic of the disease, being slow, and snoring; it is technically called stertorous: the cheeks and lips puffed, as though using a blow pipe. The countenance may be pale, turgid, or livid; the pupils are commonly contracted, but may sometimes

from the commencement be found dilated : this apparent contradiction may, and doubtlessly does arise from the prior condition of the patient, who, if the magnetic state predominates, will be found with the contracted pupil, but, where the electrical is dominant, dilation thereof will exist.

Death is preceded by a profuse perspiration—often cold and clammy—bathing the whole body, and indicative of extreme electrical depression.

Such is apoplexy as it commonly presents; but the practitioner will not unfrequently witness cases in which *coma* is not the earliest and most marked symptoms; but the attack is ushered in by a severe and unusual pain in the head—the individual becoming faint, pale, and sick; he falls down in a state simulating syncope, with an exsanguious skin and feeble pulse. The cerebral pain is sometimes accompanied by slight and transient confusion of intellect, from which he may in a short time rally, rise, and walk; but the pain usually remains. In the course of a few hours the patient becomes heavy, fretful, incoherent, and sinks into lethargy, and death.

*Diagnosis.*—Apoplexy may be contra-distinguished from coma resulting from a narcotic poison, or deep intoxication, by the general history and circumstances of the case, odor of the breath, etc. In all doubtful cases use the utmost caution in treatment; and above all things never bleed, either topically or generally.

**PREMONITORY SYMPTOMS.**—Headache, accompanied with vertigo, but without any indications of disordered stomach, nausea or vomiting; transient deafness, or momentary blindness; slight and partial paralysis; squinting, double vision; defective speech; drooping of one eyelid; numbness or palsy of one limb; loss of retentive or grasping

power; forgetfulness of the most common words, as names, etc.

**PREDISPOSING CAUSES.**—The “authorities” say that those whose ancestors have been subjected to the disease;—and especially persons having large heads, short thick necks, sanguine temperament, and fleshy structure, that is, corpulent persons are more exposed thereto than those of the opposite conformation: yet Dr. Watson says—“apoplexy is common in persons who are tall, pale, and thin,” also in those who have passed the age of fifty,—i. e.—as the vital powers are tending to exhaustion.

Prof. Wood says,—“It is no uncommon event for tall and thin persons, with pale faces, and small heads, to die of apoplexy;” “old age is a predisposing cause, and probably the most powerful.”

Says Dr. Elliotson, “I am sure that some persons have had apoplexy from having been bled too frequently, even locally—and having been deprived too long of food.” Let these facts be remembered when we describe the “regular” mode of treatment, by the lancet and depletion.

The annexed extract is of deep significance, and conveys an important lesson.

The inmates of a penitentiary, by gross mismanagement, were all but starved. “An ox’s head weighing eight pounds, was made into soup for an hundred persons. After they had been living on this food for some time they lost their color, flesh and strength, and could not do as much work as formerly. . . . . The affections which came on during this faded, wasted, weakened state of body, were headache, vertigo, delirium, convulsions, and APOPLEXY.” Remember, this is not our statement; here are no displacement of words, no misquotations, for the pur-

pose of sustaining an hypothesis. The quotation is a literal extract from the report of Dr. Latham, the physician who was commissioned by the British Government, to enquire into the cause of the great mortality in that penitentiary. Dr. Latham's testimony cannot be gainsayed—and yet it incontrovertibly proves that Apoplexy is often caused by lack of nutrition, inducing a low and enfeebled state of the whole system. Hence we see, from the authorities, that blood-letting and starvation, are the most available means for the production of this dreaded disease, which does not so generally depend upon plethora, as upon a weakness of the blood-vessels, inducing a tendency to rupture and consequent effusion.

**TREATMENT.** The great stress which the “authorities” have laid upon the coma resulting from apoplexy, and narcotic poisons, deemed necessary from the heroic treatment recommended in the former,—is, to the new school practitioner, of little value, from the fact that the treatment we adopt is equally applicable to the state of the patient, whatever may have been its immediate cause. The object first to be attained is to overcome the coma, and for this purpose the cold dash is the most generally available, aided by an emetic whenever its administration is practicable.

Emetics first act upon the brain, the vomiting being a secondary result. In proof of this assertion, give a man a blow upon the stomach, let him go to sea, put him into a circular swing, or cause him to turn quickly round, or show him an object which excites the feeling of disgust, and in a few minutes he vomits; is not emesis so induced the result of cerebral action? Inject ipecac into the vein of a dog, or a solution of tartar emetic into the vein of a man, and vomiting is also induced. Are not these facts

conclusive, that the result called vomiting is produced by a change of the electrical condition of the brain? that the brain and nerves are the media through which, and through which alone all functional movements are produced. Again, it frequently occurs that emetics, so called, will not produce emesis until the state of the brain has been changed by the application of the cold douche to the head; and in some instances, where the stomach is thus insensible to the action of medicinal agents, the cold dash will rouse the brain, and the patient will, after an effort or two, stagger to his feet.

The assumption by the schools, that a ruptured vessel is always a concomitant of apoplexy, is a fatal and pernicious fallacy; for in the coma produced by narcotics, in which the apparent state of the patient is the same, where is the ruptured blood-vessel? The same question applies to the intermittent coma of puerperal convulsions; a result which may be produced by active hemorrhage, profuse depletion, or starvation, all of which rapidly exhaust the brain.

RUPTURE of a blood-vessel is seldom present in apoplexy: on the contrary, cerebral effusion when present, is most frequently the result of exudation through the weakened arterial coats. Even in the apoplexy of free livers, where alcoholic drinks have been immoderately used, the fact of exudation will be found to exist in a large majority of cases, and rupture of a vessel seldom.

What were the post mortem appearances found in those poor inmates of the Penitentiary, who died of apoplexy induced by starvation? "Increased vascularity of the brain, and sometimes fluid between the membranes and the ventricles, says Dr. Latham." Not a word of active

hemorrhage ! of ruptured vessels ! and for the best of all reasons, they had no existence. There may then be transudation, the result of a loss of arterial tonicity ; but a fallacious and dogmatical orthodoxy has spun a web of prejudice that encircles the routinist, from his matriculation to the grave ; a prejudice upon whose altar hetacombs of victims have been immolated.

What then is the “ orthodox ” treatment of apoplexy ? “ this disease of advanced age,” and to which “ old age is the most powerful predisposing cause ;” a disease induced by loss of blood, starvation, or any other agent which tends to impair the tonicity of the arterial fibers ? General and local abstraction of blood is the “ sheet anchor.”

And what is the result of the “ regular ” practice in this, so-called, formidable disease ? Let Dr. Copeman (of London) answer the question. That distinguished man, long entertaining the opinion “ that the popular, as well as professional prejudice in favor of bleeding in affections of the brain, is not justifiable by the result of the practice,” commenced a series of statistical examinations, of which the following is the result :—

Cases bled	129 :	Cured	51 :	Died	78.
Cases not bled	26 :	Cured	18 :	Died	8.
Proportion of deaths treated by bleeding, 1 in 1 2-3.					
“	“	“	“	without bleeding,	1 in 3 1-2.

Surely facts like the preceding, educed from the admissions of the old school practitioners, should forever annihilate the dogma that “ bleeding is the only remedy to be depended upon in the treatment of apoplexy.” Of what value are assumptions, theoretical notions or authoritative declarations, in the place of facts like the preceding ? Nay, one such series of facts as that furnished us by Dr. Cope-



man, must outweigh a thousand dogmatical assertions, or ten thousand baseless and fallacious theories.

In apoplexy—where the face is pale, and the general appearance of the patient simulates the cold stage of Intermittent Fever, (the electrical state,) the indications are for the exhibition of stimulants, with cold water to the head, sinapisms to the temples and lower extremities, and brisk stimulating frictions to the spine. The after treatment of the case, must be in accordance with those general indications which are met by intermittent remedies, and generous diet ; and the intermittent treatment may be appropriately made stimulating by the exhibition of piperine, capsicum, or brandy and water.

In cases marked by heat and turgescence of the face, with a preponderance of the developments of the magnetic, or febrile state, the douche, (cold) should be applied to the head, until evidence of a change of condition is manifested. If the patient can swallow, nauseants or an emetic should be administered, for the attainment of remission. Where swallowing is impracticable, enema of a *strong* infusion of lobelia should be exhibited, at short intervals, until emesis is produced. As soon as sensibility has been restored, our next duty is to do just what Drs. Wood and Watson advise should not be done, viz,—to order sustaining food, and to put the patient under prompt intermittent treatment, as quinine, hydrocyanic acid, etc., those valuable agents described by Dr. Watson as “ foolish remedies.”

In many cases the ferruginous preparations, combined with small doses of leptandrine, or podophylline, will be found serviceable.

The “new school” practitioner will never resort to bleeding, either general or local, in the treatment of this, or

indeed any other modification of disease ; for Dr. Watson declares that blood-letting *will cause* apoplexy,—that cupping, merely, will produce palsy. Indeed, adds this eminent authority, “ similar cases have been noticed by other persons.”

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## SECTION V.

### INTERMITTENT FEVER, WITH MOTOR MODIFICATIONS.

The phases of disease to be considered under the above classification, are marked by a greater or less degree of spasmodic action of the muscles. They are paroxysmal and intermittent ; and are further characterised by the periodicity of the paroxysmal disturbance. Their manifestations are either preceded by chronic constitutional disturbance, or are the immediate result of the inception of some external disturbing cause.

#### 1st. *Chorea,—or St. Vitus's Dance.*

Chorea is usually a disease of childhood, although it may be occasionally found at the age of puberty, and more rarely at a still further advanced period of life. Girls are the most generally exposed thereto, although the other sex are not exempted from its manifestations.

Chorea is characterised by involuntary muscular contractions, occasionally quick and jerking, but more frequently resembling voluntary movements. Consciousness is unimpaired, and, excepting in very severe cases, the power of the will is to a large extent retained.

The access of chorea is gradual, being preceded and attended by symptoms of derangement of the digestive functions, as irregular appetite, constipation, and swollen abdomen; a change of temper is also apparent,—the child becomes impulsive and irritable, and its sleep is disturbed, frequently awakening by starts, as though affrighted with some distressing dream.

The first unusual movements noticed are, generally, ludicrous grimaces, shrugging of the shoulders, catching of the fingers and other joints; sudden movements of one or more of the extremities, until the grotesque involuntary movements implicate the voluntary muscles of the whole body. These movements are aggravated when the child feels that it is observed, or when submitted to any active emotion; but during the night they almost entirely cease.

Prof. Wood admits that chorea is a disease of debility, dependent on a feeble condition of the motor system of nerves, increased by an imperfect discharge of the digestive functions. He also observes that “an unsteady, excitable state of the nervous system, constitutes a predisposition to chorea,” such a state being “apt to attend a feeble condition of the general health.”

Hence the therapeutical management of chorea is at once obvious; the general health of the patient is to be restored by attention to appropriate diet, the state of the secretions, and the administration of suitable intermittent remedies. Early in the morning—for a child 12 years of age—give, as an anti-periodic, quinine sulph., gr. ii.; morph. sulph., gr. 1-6; and at intervals of four hours, the following:—

R. Zinci Valerianatis, gr. vi.  
Piperin,, gr. xviii. M. et div. in pulv. xii,

In cases attended with costiveness, small doses of leptand., 1-10 to 1-6 gr., may be added to each powder ; and if the bowels need restraint, 2 to 3 grains of Dover's powd. may take the place of the leptandrine, and if required, tannic acid may be also conjoined.

The following formulæ may be of advantage as alternatives :—

R. Stramonii Ext., gr. i.  
 Quiniæ Sulph., gr. xii.  
 Piperin., gr. xii. M.  
 Div. in Pulv. viii.  
 One every four hours.

R. Ferri Citratis., gr. xxxii.  
 Quiniæ Sulph., gr. xvi.  
 Aquæ, ℥ ii. M.  
 A teaspoonful every four hours.

In severe cases, frictions down the spine with a liniment of chloroform and olive oil, in equal proportions, may be of advantage ; strychnine, in doses of 1-24 of a grain, combined with citrate of iron, in solution, has been found useful ; and where a verminous habit exists, turpentine may be administered in emulsion. Abundant exercise, the shower bath, dry frictions, and magnetism should not be forgotten.

Prof. J. K. Mitchell advises a purgative treatment mainly. Prof. T. D. Mitchell says he has often been called to cases in which purgatives had been freely used without advantage ; the purgatives were at once laid aside and tonics (magnetic remedies) exhibited, “ which at once cured them ;” thus proving the constitutional character of the disease, and the true principles of treatment.

## 2d. *Paralysis.*

A word derived from Παραλυσω—to loosen, or relax.

Paralysis sometimes follows an attack of apoplexy. It is characterised by a diminution or loss either of sensation, or of motion, or both,

We meet with three varieties of paralysis :

1st. *Hemiplegia*, in which one half the body, divided by a vertical line, is affected.

2d. *Paraplegia*,—where half the body is affected, as divided by a horizontal line, which includes the lower extremities.

3d. *Paralysis Partialis*, when some part of the body, as a limb, the face, an eye, the tongue, etc., is exclusively attacked.

GENERAL SYMPTOMS.—The general symptoms are characteristic of the predominance of the electrical state. Increased secretions ; deranged sensations as prickling, formication, weakness and coldness. The affected part usually loses substance and becomes flaccid ; the skin is pale, the circulation languid, and the general temperature necessarily reduced. The mental powers are also depressed and weakened, and the memory seriously affected—the patient is melancholic and brooding, and sheds tears upon the most trivial occasions. Hence where paralysis is not immediately caused either by apoplectic effusion, caries of the spine, or mechanical injury, it is preceded by those phases of constitutional derangement, which are so distinctly manifested by the predominancy of the electrical state.

HEMIPLEGIA.—This manifestation of palsy is a frequent sequitur of apoplexy, and hence its development is apparently sudden. The left side of the body (when divided by a vertical line) is most usually the seat of attack ; even the tongue and lips are, from the median line, subjected to the morbid state.

The lower limb generally recovers before the upper, which usually remains weak for a long period ; indeed,

the subject of the attack seldom wholly recovers his prior activity and vivacity, but remains to the end of life's career, a broken down man, with powers of body and mind more or less impaired.

**PARAPLEGIA.**—Not only the lower extremities, but a part of the trunk, transversely divided, may be affected. Paraplegia most commonly follows mechanical injury of the spine, or is preceded by caries thereof: when thus produced, there is pain and tenderness of the spine or pressure; if of cerebral origin, headache and vertigo will be coincident. If its accession is gradual, the patient walks with a shuffling gait, frequently stumbling, until at length all command of the limbs is lost. Constipation and retention of urine next ensue, soon followed by muscular relaxation and involuntary discharges.

**PARALYSIS PARTIALIS** is exceedingly diversified in its manifestations; it may involve a whole limb, or only a single member, as a finger or toe; in some cases, a single muscle may be affected, interfering with some functional movement, as deglutition, or the power of speech; one side of the face, or a single eyelid may be paralysed, or sight and hearing may be impaired. These several manifestations will, however, be found more or less intermittent in their character; and it is only necessary closely to examine the case, to detect the intermittency of symptoms.

**TREATMENT.**—The marked preponderance of the electrical state, demands the administration of prompt stimulating intermittents. The general health should be improved by the use of all available means; baths, as the cold shower, should be cautiously employed, and followed by brisk friction to secure reaction. Dry friction to the

limbs, and *down* the spine. Study the individualism of the case ; the man more than the disease ; the whole more than the part. Electricity and galvanism are often of great utility.

For internal administration, the following are good combinations :

R. Strychnine, gr. 1-20.  
Quiniæ Sulph., gr. i.  
Argent. Nitrat., gr. 1-2. M.  
The above may be given at intervals of four hours.

R. Ferri Phosphat., gr. v.  
Quiniæ Sulph., gr. ii. M.  
May be repeated at intervals of three to four hours.

R. Sulph. Cupri,  
Strychnine, a. a. gr. i.  
Potassæ Cyanuret., gr. iiss.  
M.  
Make into pills xx, with Ext. Gentianæ ; of which one may be given soon after each meal.

R. Hydrocyanici Acidi, gtt. ii. to iv.  
Cantharid. Tinct., gtt x to xx. M.  
The above may be given in water every four hours.

R. Valer. Zinci., gr. ss.  
Piperin., gr. ii. to iv. M.  
Once every three or four hours.

R. Zinci Sulph, gr. ss.  
Ferri Phosphat., gr. v.  
Piperin., gr. ii. to v. M.  
The above may be given every three or four hours.

From the general character of the above combinations, the treatment indicated may be gathered—they may be advantageously interchanged. Leptand., and podophyll., may be conjoined where indicated ; and other symptomatic remedies where deemed requisite.

### 3d. Tetanus.

Distinct from those manifestations of constitutional disturbance, in which the function of voluntary motion is impaired or lost, we have now to notice another phase of disordered motor force—the distinctive character of which

is its *perversion* ;—the muscular movements are performed in an irregular, or spasmodic and unnatural manner.

One of the most formidable and fatal of these motor perversions, is tetanus,—a phase in which the muscles are in a state of rigid and permanent contraction,—with paroxysms of brief and painful spasms, alternating with irregular intervals of more or less relaxation, yet without any marked disturbance of the mental powers.

Tetanus may be traced to two causes,—1st.—Local external injuries or violence ; and 2d,—The development of some local point of irritation in the cerebro-spinal axis ; but by the former causes, the disorder is most frequently induced.

**PREMONITORY SYMPTOMS.** Chilliness, depression of spirits, twitches in the wounded or injured limb, or deep pain in the affected part, shooting towards the spine.

The first symptoms of the attack are usually manifested about the muscles of the throat, neck, and jaws, causing difficulty or uneasiness in bending or turning the head, or in an attempt to open the mouth widely ; deglutition is also attended with much obstruction. These evidences are the indications, to the observant practitioner, of the true and terrible character of the impending attack.

The more marked symptoms are a gradual but firm closure of the jaws, spasm of the diaphragm, soon extending to the muscles of the face, trunk, and extremities, and lastly to the muscles of the tongue.

The pain is paroxysmally aggravated, each paroxysm increasing the contraction of the parts implicated. During these exacerbations, the aspect of the patient is often frightful : the forehead is corrugated, the brow knit, the orbicularis muscle of the eye rigid, and the eye itself fix-



ed and staring, the nostrils dilated, the corners of the mouth drawn back, the set teeth exposed fully to view, and the features fixed in a ghastly grin, to which the phrase "risus sardonius" has been applied.

Tetanus is more common after injuries to the extremities than the trunk, and especially after punctured wounds—a nail in the sole of the foot, or a splinter injuring the ball of the thumb, are the most common causes of this terrific disorder.

**NATURE OF TETANUS.** The phenomena of tetanus during life, as well as after death, has remained inexplicable, for seldom, if ever, can there be found any traces of disease either in the brain, or spinal marrow.—The most probable cause of these phenomena is a mere irritation of the spinal column, with a large increase of motor force, determined to the muscles affected. Dr. Gerhard can find none. Prof. Dunglison says the organic cause, or the precise condition of the nervous system, which gives occasion to tetanus, escapes us in the existing state of our knowledge.

**TREATMENT.** In the treatment of tetanus, however humiliating the admission may be to professional pride, and opposed as it may appear to the boasted progress of medicine, there has been no improvement since the days of Hippocrates; and he who reads the standard and most popular text books, will find that death is indeed the rule, escape indeed the rare exception. But why has this disease been so "extremely fatal?" (*Wood.*) Let the orthodox treatment be briefly reviewed, and the answer will be apparent. 1st. *Opium.* 40,000 gtt. of tinct. opium has been administered in twenty days. ℥ i. of solid opium has been given daily for 22 days. In a *post mortem* case, Abernethy reports that he

found enough undissolved pills of opium in the stomach, to poison a dozen healthy men. Success under such treatment cannot be expected.

2d. *Bloodletting* in every form has been most freely and most mercilessly pushed. A case is recorded where bleeding was repeated 8 times in 19 hours, 16 ounces each bleeding,—with 742 leeches along the spine, and 50 to the epigastrium. Twelve pounds of blood, in another case, was taken at six bleedings; and such is the record *ad nauseam*; does it not justify the phrase used by Surgeon Cooke, of London, who in detailing the bloody treatment of hydrocephalus, calls it “routine slaughter.” Where the patient lives through opium, lancet, and leeches, he has yet another ordeal to run—for purgatives are next called in. A case is recorded, in which the patient took, in forty-eight hours, 210 grs. of scammony, 89 gamboge, 80 calomel, 1 ounce 4 scruples jalap, and 2 1-3 pints of infusion of salts and senna.

Rush and Hosack successfully administered wine and bark, but the philosophy of their success remained a mystery; the reader of this compendium will be at no loss to understand the result attained by these, and similar agents.

Tetanus should be treated on the principle of paroxysm and remission, in common with every other manifestation of disease; and in the remissional periods, a prompt impression, by active intermittents, should be made upon the nervous system.

Upon the manifestation of tetanic symptoms, the vapor bath should be at once employed, and the following tincture conjoined therewith, given in table spoonful doses every 7 to 10 minutes, until the spasms are overcome, and remission is attained:—

R. Lobeliæ Semin.,  
 Valerianæ Pulv.,  
 Capsici Pulv., a. a.  $\mathfrak{z}$  viii.  
 Alcoholis, Cong., ss.

This tincture should be made by displacement. The injured part, or point of local irritation should be also bathed with the same.

Remission attained, full doses of quinine and iron should be administered at intervals of an hour or two, until a permanent impression is made upon the nervous system; and for the purpose of sedation, hydrocyanic acid may be given in two to four drop doses, every two to four hours; and morphine may be added to the quinine, if indicated, or the valerinate of zinc.

In severe cases, a blister should be applied along the spine, and the denuded surface dressed with the quinine cerate,  $\mathfrak{z}$  ii to the ounce.

The *N. O. Med. and Surg. Journal*, details a case, the cure of which is wholly attributed to quinine; and a case is recorded in the *Med. Gazette*, of a boy 16 years of age—who, from a wound in the great toe became tetanic, and was cured by large doses of quinine with morphine.

Wherever tetanus has been cured, the cure has been effected by the exhibition of magnetic or intermittent remedies, administered however without any knowledge of their true mode of action, or their immediate relation to the case.

Chloroform may often be advantageously employed; and turpentine as an anti-periodic, given in large doses, has been found useful.

#### 4th. *Hydrophobia.*

The fact is indisputable that the bite of animals of the

canine and feline species, at least, when rabid, will produce that series of symptoms upon the human subject, which has been nosologically designated hydrophobia, and from which, when fully developed, the "regular faculty" do not recognise a single cure.

**PREMONITORY SYMPTOMS.**—The wound or cicatrice tingles, or aches, or some unnatural sensation is realised in the part, which sometimes swells and becomes red or livid, but rarely opens afresh. These indications sound the note of alarm, and are as the voice of death, proclaiming to the doomed, that his remaining days on earth are few and numbered.

**SUBSEQUENT SYMPTOMS.**—Pain or stiffness about the jaws, an inability to swallow, and a dread of water,—the attempt to swallow producing paroxysms of choking. Soon those convulsions are developed which mark the fearful nature of the disease,—involving especially the muscles connected with deglutition and respiration; recurring with continually increasing frequency, and aggravated intensity, until the patient sinks into the darkness of death, with the most intense and heart-rending sufferings.

**TREATMENT.**—Says Prof. Wood, "the whole magazine of therapeutics has been exhausted, and *vainly exhausted*, in the treatment of hydrophobia. "Of these (says Prof. Gibson) opium, mercury, belladonna, cantharides, arsenic, and blood-letting, have been considered the most powerful," and the uniform fatality of the practice of the old schools proves the truth of the Professor's assertion!

What then are the indications for a hopeful or successful treatment of hydrophobia, as it is manifested in the human subject? Certainly not in fastening down upon the

patient "the copious secretion of the viscid mucus," which "contains the poison," by the continued administration of opium, morphine, white hellebore, etc.; but in promptly removing those morbid secretions as rapidly as they are eliminated, by the exhibition of powerful stimulating emetics, which will at the same time uphold the vitality of the nervous system.

To meet this most important indication, the annexed formula will be found most serviceable.

R. Myrrhæ Pulv.,  $\frac{3}{4}$  xvi.  
 Capsici Pulv.,  $\frac{3}{4}$  ii.  
 Alcoholis, Cong. i.

Macerate for ten days in a warm place, and add to the strained tincture,

Lobelia Semin. Contus.,  
 Capsici Pulv.,  
 Valerianæ Pulv., a.a.  $\frac{3}{4}$  viii.

After standing an additional ten days, filter for use.

Let the wound be kept constantly wet with the above tincture, and when paroxysms occur, immediate recourse should be had to the stimulating foot-bath; if the surface be cold, place the patient in the vapor bath, giving at the same time two or three table spoonfuls of the tincture, in a strong infusion of bayberry, or other herb tea, every fifteen or twenty minutes, as may be demanded by the severity of the symptoms and intensity of the paroxysm, which must be overcome, and full emesis induced. As adjuvants, chloroform may be inhaled, and enemata of the tincture and infusion conjoined.

After the bath, vomiting, etc., the patient will become tranquil, and most probably pass into a tranquil sleep, which may be prolonged for several hours,—to awake

however, at length, as a new elimination of the morbid secretion is accumulated in the fauces and prima via, to a renewal of the paroxysmal disturbance. To attempt the prevention of the repetitive paroxysm, should be the object of the medical attendant ; and to this end, as soon as remission has been attained, and before sleep occurs, the patient should have administered to him from 10 to 20 grains of quinine, in combination with hydrocyanic acid, from 3 to 6 drops.

If the paroxysm is repeated, the treatment must be recommenced, again using the bath, the tincture, etc., as before described ; and upon the re-occurrence of the intermission, the quinine etc., should be repeated. Morphine may be conjoined with the quinine, if indicated by restlessness.

Should sleep prevent the exhibition of the intermittents, per ora, they may be administered as enemata, and in that case, the quantities should be doubled, or even trebled.

Perseverance, with a close attention to paroxysm and remission, for a few days, will afford the practitioner the pleasurable satisfaction of witnessing recovery from a disease which has ever been, and yet is the opprobrium of "regular" and "scientific" medicine.

## SECTION VI.

## INTERMITTENT FEVER,—WITH DIGESTIVE MODIFICATIONS.

Many important phases of disease are developed in the complicated apparatus of digestion,—phases which are of deep interest to the intelligent practitioner, because several of them are frequent, and fatal, under the ordinary treatment of the schools.

*1st. Angina Faucium, and Pharyngitis.*

In addition to the pain attendant upon the act of deglutition, inspection will reveal that the fauces, i. e., the velum, the half arches, and the pharynx are reddened and more or less swollen.

When the disorder becomes chronic, the mucus membrane is thickened, and there is a constant sense of uneasiness, with redness of the parts.

TREATMENT.—The cold water cravat, around which is bound cotton batting, may be applied to the neck, and repeated as indicated. Iced water, and gargles slightly acidulated, may be also conjoined. These means are usually sufficient for the cure. Salts in solution, as a purgative, if indicated, when the magnetic state predominates; and an alum gargle may be useful.

These means failing to afford prompt relief, volatile liniment, or a liniment of turpentine and sweet oil, may be used; and if the parts are much swollen, with marked febrile symptoms—nauseants, or an emetic may be admin-

istered, followed by two drop doses of hydrocyanic acid, every three or four hours.

In chronic cases, solution of nitrate of silver, or sulphate of zinc, six to ten grs. to the ounce, may be applied.

When whitish spots, or small white ulcers, with red, inflamed borders, appear in the fauces or pharynx, they may be readily removed by the application of a solution of nitrate of silver—twenty to thirty grs. to the ounce. When the ulceration is serious, intermittents are indicated, to improve the general health.

### 2d. *Cynanche tonsillaris*—*Amygdalitis*, or *Quinsy*.

This well known disorder does not require definite description. Its general characteristics are dysphagia, the tonsils are swollen, reddened, and painful,—the pain shoots towards the ears,—the voice is much changed, and the tongue heavily furred. Slight rigors, with softening of the tumefaction, announce the suppurative process.

Occasionally the suffering of the patient, and the sense of suffocation are so great, as to demand the opening of the tumor, which may be readily effected by a sharp bisturiy. Sometimes the efforts made by the patient to get breath, break the tumor, and relief is immediate.

CAUSES. Exposure to sudden changes of temperature is the most common exciting cause; but in many cases there is an inherent *predisposition* thereto, inducing an attack upon the slightest exposure to atmospheric changes. It is also sometimes seen as a coincident with scarlatina, etc.

TREATMENT—*Prevention* —Gargle the throat frequently with cold water, and bathe the neck and throat with the



same, night and morning, or with salt water. The physician is seldom called in time to procure resolution, or prevent suppuration. If seen early, a cataplasm of honey, fine cut tobacco, and gum camphor, applied warm to the throat, may disperse the swelling, particularly if assisted at bed time by a hot foot bath, and Dover's powder. Emetics, even at a later period, are useful to clear from the throat the viscid phlegm ; they also abate the febrile action, reduce the pulse, and promote perspiration ; and when suffocation is almost threatened, the expulsive emetic effort often breaks the abscess. If constipation exists, 1 to 3 grs. of leptandrine may be administered ; or a laxative dose of any saline remittent.

In some cases, poultices containing opium may be demanded ; or a poultice of bitter herbs and stramonium. A liniment of turpentine, camphor, oil of sassafras, and olive oil, is often useful.

After suppuration has ensued, gargles of very dilute muriatic acid, or of chlorinated soda, are useful to correct the fetor, and stimulate to healthy action. The enlargement of the tonsils, which is often seen after the termination of the disease, may be reduced by the application of the iodide of zinc, or the tincture of iodine.

### *3d. Gastritis, or Inflammation of the Stomach.*

The mucus coat of the stomach is exceedingly liable to disordered action, for in contact with it, all agents or aliments, whether hot or cold, appropriate or otherwise, sedative or irritating, must come. Great is the exposure and the abuse to which the stomach is subjected, as well in high as in low life, alike by intemperance and starva-

tion ; and great is the wonder that it is not more frequently the subject of disease. There is nothing too bad, nothing too injurious to be thrown into this important organ, and yet its resistance to disease is a matter of absolute astonishment.

**SYMPTOMS.** The symptoms of gastritis are tenderness on pressure, increased by full breathing, as also by food and drink, which are frequently rejected. There is often a sense of burning heat, with most distressing nausea and vomiting. The pain often extends to the back—the middle of the dorsum,—and is intermittent. Vomiting first ejects egesta, then bile, and lastly acids. The tongue is red, and there is thirst, which abundant drinks do not allay.

The symptoms are not always thus severe. The epigastric pain is often dull, increased only by *excess* of pressure, and augmented by food, and is paroxysmal. The mouth is dry, and the tip and sides of the tongue more or less reddened,—and there is most commonly some constipation.

**TREATMENT.** Remove indigestible matter by warm water, drank to emesis. Apply cloths saturated with a solution of cyanuret of potassa,  $\zeta$  i to ii to the pint ; and give internally, hydrocyanic acid in doses of from gtt. ii to iv, every three or four hours, with ice cold mucilages, or small pieces of ice. If these means do not afford full relief, apply dry cups to the stomach, if pressure can be borne, or to the spine opposite, followed by warm soothing applications.

**CHRONIC.** In chronic cases, regard must be had to the general health, which should be improved by attention to diet, and appropriate treatment. For the burning sensa-

tion, which is commonly caused by the excess of acid in the stomach, the following will be found useful.

R. Potassæ Carbon.,  $\mathfrak{D}$  ii.  
Hydrocyanici Acidi, gtt. xvi.  
Aquæ,  $\mathfrak{z}$  iv. M.

Of which a table spoonful may be administered every four hours. Or the annexed may be advantageously employed;

R. Cupri Sulph.,  
Strychnine, a. a. gr. i.  
Rhei Pulv. gr. xviii.  
Hyosciami Ext., gr. xl. M.

Divide in 20 pills—and give one with, or soon after each meal.

Sometimes a pill of nitrate of silver will remedy the case ; for this purpose 1-8 to 1-4 may be given, in crumb of bread, 3 to 4 times daily.

#### 4th. *Dyspepsia, and its Phenomena.*

There is a large class of peripatetic patients whose thousand and one complainings—all of which are comprised under the general phrase, dyspepsia, afford the practitioner ample scope for the exercise of *patience*, for they all seek relief at his hand, but are usually unwilling to submit to any restraint in diet.

Though chronic gastritis, when mild in its nature, is but one of the phases of dyspepsia, yet those agencies only will be considered under this head, that produce evident derangement of the processes of digestion and assimilation, or a defective performance of the functions of the stomach, which are not marked by inflammation or organic disease.

Mere irritation of the stomach may arise,

1st. From a sluggish state of the portal capillaries of the liver, indicated by scanty and light colored evacuations, sallowness of complexion, irritability and depression of spirits, fulness and uneasiness of the epigastrium, propensity to nausea, etc.\*

2d. The contents of the stomach are frequent sources of irritation, pain, cramps, vomiting, cholera morbus, headache, delirium, etc. Not food alone, but its own secretions often occasion heart-burn, sick head ache, violent cramps, severe spasms, etc., all of which are most promptly remedied by emetics, or by full doses of leptandrine and podophilline, followed by small doses of leptandrine, 1-2 gr., and quinine, i. gr., soon after each meal. Occasionally these may be continued with bi carbonate of soda, in ii. to v. gr. doses.

3d. Spinal disorder, or other sources of nervous supply to the stomach, are frequent causes of dyspeptic symptoms. This is often the case in delicate females, and may be distinguished by some point, or points of tenderness manifested by slight pressure upon the vertebræ. In such cases, local treatment may be sometimes advantageously applied to the points of irritation, but they will usually demand, and be more successfully combated, by the administration of remedies which act upon the cerebro-spinal system. Hydrocyanic acid, strychnine, and nitrate of silver, may be especially named in this relation.

4th. Gastrodynia, is a severe and frequently recurring pain or cramp in the stomach. It is contradistinguished

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\*This state may be readily overcome by the following, given night and morning: podophilline, 14 gr., irisine, gr. ss, leptandrine, gr. i. ; in pill, or syrup.

from gastritis by the absence of fever, nausea, or vomiting, the length of the intermittent period or immunity from pain, the relief afforded by pressure, and by hot stimulating drinks. This painful state may arise from emptiness of the stomach, and acrimony of the fluids; or after eating, when the mucus membrane is in an irritable state; or two or three hours later, when the acids are in excess in the *prima via*; or lastly, it may occur at any time, in violent paroxysms,—and this is the true phase of the symptom.

For the relief of dyspeptic cramps, a large draught of *hot* water may be administered, or hot brandy and water, or hot ginger tea. Four to six drops of prussic acid, will in most cases, give prompt relief. Intermission attained, the following may be given :

R. Sulph. Quiniæ, gr. xxxii.  
 Sulph. Morph., gr. iv.  
 Hydrocyanici Acidi, gtt. xxxii.  
 Acidi Sulph. Aromat., gtt. xv.  
 Aqua, ℥ iv. M.

A table spoonful may be administered every four hours, during the continuance of the intermittent period. The volatile tinct. of guaiac will be often found very serviceable.

5. *Pyrosis*—water-brash is a paroxysmal vomiting or eructation of a thin, watery, sourish, or insipid fluid, preceded by a sense of constriction or pain, and a burning sensation at the pit of the stomach, which ceases upon the ejection of the offending fluid. Its cause is hence apparent, being induced by vascular irritation of the mucus membrane, preceded by debility of the organ.

The indications are to improve the general health, and for this purpose the following will be useful :

R. Strychnine, gr. i.  
 Potassæ Cyanureti, gr. iv.  
 Sapon. Hispan., 3 iss. M.

Make into twenty pills, of which one may be given an hour after each meal. The following have each been advantageously employed : tannin 3 to 5 grs. with quinine 1 to 2 grs., or oil turpentine, 10 to 15 gtt., three times daily : sub. nitrate of bismuth, 3 to 5 grs., 3 times daily : opium 1-4 gr., kino gr. ii, 3 to 4 times daily.

6. Constipation is almost always a coincident of dyspepsia, and the dyspeptic is usually of sedentary habits. Hemorrhoids are also of frequent occurrence in habitual costiveness, and are hence appropriately considered in this connection. Constipation is usually attended with lethargy, drowsiness after meals, and headache. For the removal of this phase of dyspepsia, much may be effected by appropriate regimen. Coarse bread, baked apples, and a diet mainly vegetable, will, in many cases, by perseverance effect the required change. When insufficient, these means may be aided by any of the following, or similar combinations.

R. Strychnine, gr. i.  
 Leptandin., grs. xl. M.

Make into twenty pills, with extract of cicuta, q. s.,—of which one may be given three times daily, after meals.

R. Aloes Pulv., gr. xxiv.  
 Leptandrine, gr. xxxvi.  
 Alcohol. Ext., Nuc. Vom., gr. xii. M.

Make into 24 pills, of which one may be given at bed-time.

7. Cephalagia Spasmodica. Many dyspeptics are tormented with sudden and paroxysmal attacks of sick-head-

ache, preceded by vertigo, depression of spirits, perversion of hearing and sight, coldness of feet and hands, with marked *chills* and *hot flashes*.

Very slight causes may induce an attack, where predisposition exists,—excess in eating and drinking, fatigue, excitement, passion, etc.

**TREATMENT.** Cleanse the stomach : neutralize its acidity, regulate the secretions, “ tone up ” the whole system, and so improve the general health. Advise prudence in diet, in labor, in pleasures, in all things.

All these phases, and numerous others which will ever and anon meet the practitioner, are but developements of that *something* to which the designation *dyspepsia* has been applied. What then is dyspepsia ? It is a *result*, and not a *disease* : a result dependent upon a great instability of the brain, induced by any and every cause which tends to give predominancy to the electrical state, and to diminish the nervous force. Whatever weakens or disturbs the brain, also interferes with the digestive process. Hence the *key* which unlocks the mysteries of dyspepsia, and makes its treatment self-evident. The brain and nervous system must be strengthened ; accomplish *this* and dyspepsia, with its ever changing, never ending series of phases, will at once disappear.

#### 5th. *Cholera Infantum and Cholera Morbus.*

Those manifestations of constitutional disturbance which are marked by simultaneous and repeated attacks of vomiting and purging, attended with spasm of the stomach and bowels, and occasional cramps of the external muscles, have been called in the adult, cholera morbus ; and when

found with some additional complications, as dentition, etc., in infants and young children, it is known by the phrase cholera infantum,—these disorders, really one, are evidences of a preponderance of the electrical state.

*Cholera Infantum* prevails most during the summer, and in large cities. In severe cases, the stomach rejects every thing swallowed; the alvine discharges are first light yellow, with specks of a greenish substance at intervals; the green appearance increases, until the voided secretions look much like finely chopped and boiled greens; the odor of the discharges is offensive; in quantity large at first, but as the disorder progresses, becoming more scanty, and at the same time the abdomen becomes tympanitic. The course of cholera infantum is paroxysmal,—it has its marked phases of depression, accession, etc. During the febrile stage the mouth is hot, the tongue dry, the skin harsh and heated: the remissions are well marked, the exacerbations occurring in the evening.—(*Wood.*) The periods of intermission are marked by great languor, and prostration: the skin is cool and clammy, pallid and shrunken, and the child drowzes, or sleeps, with its eyes about half closed.

TREATMENT.—Give a small dose of castor oil to evacuate the prima via of its irritating contents. Examine the gums, and if requisite scarify to subdue local irritation. During the paroxysmal period give the following:

R. Quiniæ Sulph.,  
Tannici Acidi, a.a. gr. vi.  
Doveri Pulv., gr. ix. M.

Divide into pulv. xii; of which a child two years old may take one every two, three, or four hours. When the skin



is hot and dry, use the tepid bath,—when cold and clammy, employ *hot* water, slightly acidulated with vinegar.

The chalk mixture is sometimes serviceable, as a neutralising agent. Chlorate of potassa in solution is a beneficial beverage during the febrile stage. In cases of extreme prostration, brandy and water,—and the following powders— for a child 2 years.

R. Quiniæ Sulph.,  
Piperin., a. a. gr. vi. M.

Divide in powders vi,—give one every two, three, or four hours.

If the discharges continue, the following will often succeed.

R. Rhusin., gr. xii.  
Quiniæ Sulph., gr. vi.  
Piperin., gr. ix.  
Leptandrin., gr. iii. M.

Divide in powders xii,—give one every two hours : or the following mixture.

R. Kino Tinct.,  $\frac{z}{3}$  ss.  
Rubi. Villosi Syr.,  $\frac{z}{3}$  iss. M.

A tea spoonful may be given every two hours, and one immediately after each evacuation.

The annexed is a valuable ant-acid carminative, and often extremely serviceable.

R. Soda Bi Carb., gr. xlviij.  
Hæmatox. Campeach. Ext.,  $\frac{z}{3}$  ii.  
Cinnamoni. Ess.,  $\frac{z}{3}$  i.  
Rubi. Villosi. Syr.,  $\frac{z}{3}$  iss. M.

A teaspoonful is an appropriate dose for a child two to three years of age : repeated at intervals of two to four hours ; and given after each discharge.

CHOLERA MORBUS is characterised by the vomiting and

purging of bilious matter. When the result of some dietetic indiscretion, it comes on suddenly, attended with severe cramps; and if the health has not been impaired, it soon subsides. When not produced by the above cause, the attack is usually preceded by a sense of weight or uneasiness in the epigastrium, colicky pains, some head ache, and furred tongue; the whole ushered in by frequent chills and flashes of heat. The vomiting and purging are marked by considerable nausea, and sometimes attended with excruciating spasmodic pain in the stomach. In the paroxysmal intervals, though much easier, the patient realises distressing nausea, with great languor and exhaustion. The pulse is feeble, the countenance pale and shrunk, the skin cool and damp, the urine scanty and suppressed. The lower extremities are frequently cramped, and in very severe cases the spasms amount to general convulsions.

**TREATMENT.**—Where irregularities in diet have induced the attack, give a full dose of leptandrine, to evacuate the *prima via*, or if the case is urgent, a prompt emetic. These measures may be followed by full doses of Dover's powder, in combination with tannic acid, which will usually suffice to check the disordered state.

The general treatment of this disorder differs little from that described for cholera infantum; only increasing the doses of the remedies employed. The bilious symptoms are best combated by alterative doses of irisine (gr. 1-4) and leptandrine (gr. ss.) given every four or six hours. For the relief of the symptomatic acidity, cyanuret of potassa (gr. 1-4) with sup. carbonate of soda, (gr. v.) may be given every four hours.

The thirst may be allayed, and the irritability of the stomach subdued, by administering an iced effervescing

draught of sub carbonate of soda, (gr. vi.) tartaric acid (gr. iii.) water (℥ i.) repeated every one, two, or three hours, as may be indicated. Mucilaginous drinks, and balm or mint tea may be freely drank to facilitate the evacuation of the acrid bile,—and then reduced in quantity merely sufficient to allay thirst, etc. If the stomach is exceedingly irritable, a mustard cataplasm should be applied, and retained long enough to redden the surface; after which a warm solution of prussic acid, ℥ ss to the pint, may be advantageously applied. Opium should be cautiously administered, and where indicated by the severity of the pain should always be combined with small doses of irisine. In cases of great prostration, the following may be of advantage:—Nitrous acid ℥i, laudanum gtt xl, camphor water, f℥ viii,—of which one fourth should be administered every three or four hours.

During convalescence, to prevent a relapse, due attention should be had to the diet, which should be mainly farinaceous and mucilaginous for a few days,—after which time the ordinary diet may be cautiously resumed.

### 7. *Colica—Flatulent, Bilious, and Lead.*

The disorders already noticed in this section, involve only the mucus membrane of the alimentary canal, but the disturbances to be next considered, involve the muscular tissue also.

There are three marked varieties of colic,—the flatulent, bilious, and lead.

Any agency which destroys the muscular tonicity of the bowels,—as indigestible and succulent food etc., may induce a fit of flatulent colic; and the attack is sometimes

so severe as to be called cramp colic. During the presence of the attack, the patient seeks relief by laying upon his abdomen, or making pressure thereupon by means of his folded arms; these facts contra-distinguish the attack from enteritis, peritonitis etc.

**TREATMENT.**—If offending substances have been recently eaten, give a full emetic; if those substances have already entered the bowels, a full dose of castor oil. Should the attack not be immediately dependent upon dietetic indiscretion, the patient should drink *hot* gin toddy, ginger or capsicum tea, etc. For the relief of the pain, Hoffman's anodyne, morphine, or better still, three to six drop doses of prussic acid. In more severe cases ten to thirty drops of turpentine, in mucilage, and half ounce of the same, with mucilage, per ano.

If constipation exists after the subsidence of the attack, castor oil one ounce, turpentine one drachm, may be administered: and if habitual costiveness is coincident, let the patient take one of the following pills, after each meal.

R. Podophillin., gr. iii.  
 Leptandrin, gr. vi.  
 Aloes. Pulv. Soc., gr. xii.  
 Myrrhæ Pulv., gr. xxiv.  
 Sapo. Hisp., gr. lxxii. M.

Divide into pills xxiv.

The above is an admirable combination,—and one of much service wherever a gentle alterative laxative is desirable.

**COLICA BILIOSA.**—This form of colic is characterised by more or less derangement of the biliary organs, in connection with intestinal spasm. From this coincidence, the attack is seldom sudden, but is usually preceded by uneasiness about the epigastric and hypochondriac regions,

with frequent flashes of *chill* and *heat*. The tongue is furred ; there is a bitter metallic taste in the mouth, nausea, and vomiting of bilious matter, attended with pain, soon becoming severe,—described as twisting, cutting, grinding,—extending to the umbilical region.

TREATMENT.—Emetics, from their general remittent action, usually give prompt relief,—unlocking the portal system, calming the stomach, and subduing the muscular spasm. If the bowels are torpid, a full dose of irisine and leptandrine will be serviceable. As soon as remission has been attained by the above or other indicated means, prussic acid (gtt. iii.) and morphine (gr. 1-4) may be given every two to four hours, until the pain is wholly subdued. Should the evacuations be pale, and the skin jaundiced, the pill ordered in the treatment of flatulent colic, will be found serviceable ; one of which may be given after each meal, for a few days, or until the alvine secretions become normal.

COLICA PICTONUM.—Painter's colic ; caused by the gradual inception of lead into the system; most commonly attacks painters, who work inside, and who use white lead, and hence its popular name. Those employed in its manufacture, being much exposed to its inhalation, are also its frequent victims,—and it is often found amongst those engaged in the manufacture of polished cards for printers, and especially amongst the girls who cover the sheets with the lead preparation. In some cases, an attack has followed sleeping in a recently painted room, or even on a painted bed stead. Pickles, or apple butter, kept in glazed earthen jars, are also frequent causes of the disorder.

If the attacks are several times repeated, the patient finds, after he is relieved of the pain and constipation, of-

ten very severe and obstinate, that he has lost, to a large extent, the use of one or both hands. He can stretch out his arm, but from paralysis of the extensor muscles, his hand is nerveless, nor can he by any effort of his will, raise, or use it. Only one course can now promise restoration, that is, an entire change of occupation; if he continues to be exposed to the active cause, the accumulation rapidly progresses, the life forces are prostrated, a general cachexia is induced, and the poor being is left a miserable cripple, to sink into a premature grave, the victim of visceral organic disease.

**SYMPTOMS.**—A blue rim along the edges of the gums, discoloration of the teeth, and the muscles of a leaden hue, precede the sudden pain in the abdomen, which is twisting and excruciating; and yet is marked by remittency. The pain is general throughout the abdomen, extending to the crest of the ilia, to the breast, or spine. There is no unnatural addominal appearance, nor is the pulse, at first, much changed. Hence colica pictonum is readily distinguished from any other modification of colic, or spasm. 1st, by the history of the patient; and 2d, by the above symptoms.

**TREATMENT.** The indications are (1) to allay pain; (2) to remove constipation; (3) to allay nervous irritability; (4) to remove the lead from the system.

The first indication must be met by prussic acid and morphine; warm fomentations, anodyne enema, or enema of tobacco or lobelia in very severe cases.

The second object is attained by the exhibition of castor oil or of sweet oil, in doses as large as can be borne, and repeated once or twice daily—aided by frictions of

croton oil rubbed around the umbilicus, or by laxative enemata.

The third end is to be attained by prussic acid, full doses of extract of black henbane, or by morphine.

The fourth intention must be met by the use of a very dilute sulph. acid, sweetened—and drank as a lemonade, which it much resembles. A table spoonful of olive oil, taken into the stomach every morning and evening, will be found of great advantage.

For the resulting local palsy of the hand, the cold douche, electricity, friction, and prompt intermittents are needed.

#### *5th. Enteritis and Peritonitis.*

In simple Enteritis, there is deep seated pain, usually confined to the umbilical region, although it may exist in other parts of the intestinal tube.

Though the pain is more or less constant, it is subject to paroxysmal aggravations, and is increased by pressure. The patient feels restless, yet he keeps his body at rest, showing his disquietude by an almost constant tossing about of his arms. Hence the diagnosis is marked, and the disorder is readily contra-distinguished from ordinary cramp, colic, or a “fit of the gripes,”—in all of which pressure, and a frequent change of position afford relief—and moreover in the latter, the pain is more markedly intermittent.

If the disorder progresses, the pulse becomes hard and wirey—the tongue brown and coated,—the abdomen swells and becomes tympanitic, with a subsidence of pain,—restlessness increases with delirium,—the pulse is greatly ac-

celerated, and irregular, respiration is rapid and short, and death soon closes the scene of suffering.

The nausea and vomiting, and the fixed pain about the umbilicus, diagnosticate the disease from peritonitis.

TREATMENT.—The following is the orthodox treatment. Says Elliotson, “we should set him as upright as he can be, and bleed him from a large orifice *without mercy*.... till we knock down the pulse and make him faint.” And how thinks the reader, the pulse is to be “knocked up” again? Says the same authority, by the exhibition of a “very large dose of calomel,” and that is to be followed “by smaller doses (say 10 grs.)” every four or six hours; to these means leeches, with purgatives, as croton oil, etc., are to be conjoined: treatment certainly sufficiently heroic to kill both disease and patient, which indeed it usually does.

The true indications are to relieve the part involved, from the magnetic determination, and to procure rest. To accomplish the former, apply a cold solution of cyanuret of potassa, two or three drams to the pint, by saturating a soft towel two or three times doubled,—covering it with a surface of oiled silk, to prevent evaporation, and to retain heat and moisture. Administer, internally, one-eighth of a grain of emetine in cold solution, every fifteen to twenty minutes, until impressible nausea, and sweat is obtained; then give three to six drops of prussic acid, with morphine, third of a grain, every two hours, until the symptoms are relieved, and the second object, rest, is procured. Before the adoption of this treatment, administer a full dose of castor oil, to evacuate the contents of the alimentary canal; and large enema of warm water may be frequently repeated, for the same purpose. When



the bowels have been thus freely cleansed, enema of cold water should be conjoined with the treatment above described, and dry cups applied to the spine as a derivative, will be advantageous.

Having obtained remission of the active symptoms, and allayed the nervous irritability of the patient, add to the prussic acid and morphine, quinine gr. 1, and repeat the same every three or four hours, to prolong the intermission. Should the paroxysmal symptoms be repeated, again administer the nauseant, followed by the prussic acid and morphine, and ultimately by the powders containing the quinine. The diet should be mucilaginous, and liquid, as flax seed tea, solution of gum arabic, infusion of marsh-mallows, pumpkin seeds, etc. As convalescence becomes established, increase the quinine, and cautiously add to the nutritive character of the diet.

PERITONITIS.—A chill, or more or less depression, with sharp and severe pain, announces the commencement of magnetic determination to the structure which gives name to this modification of disease. The pain usually commences in the hypogastrium, or on one of the iliac regions, whence it rapidly extends over the abdomen, which soon becomes exceedingly sensitive to the slightest touch or pressure, and abnormally hot. The patient lies motionless upon his back, to obviate the pressure of the bowels upon the parietal abdomen, with his knees drawn up so as to relax the abdominal muscles, and to relieve the diffused pain and uneasiness he realises; and with the same object he restrains any tendency to cough or sneeze, or even a full respiration.

*Puerperal fever*, for which the “regular” practitioner is instructed to bleed the poor sufferer so unmercifully,—

is but a similar state of the external surface of the abdominal viscera. It commences over one of the ovaries (Meigs) and is rapidly extended to the external covering of the uterus, colon, and intestines, encircling the whole in a circumference of magnetic determination, hastily consuming the vital energies. Hence the constitutional symptoms are violent, and the irritability excessive—the pulse 120 to 160,—the prostration of reaction excessive, and the general involution more terrible than that which follows contused or gun shot wounds.

**TREATMENT.**—The general treatment of peritonitis and puerperal fever is the same as that described under enteritis. In each modification of peritoneal disturbance, the maintenance of free perspiration is all important. This necessary indication may be fulfilled, by the exhibition of a lobelia enema, warm vapor, and small doses of emetine, to tolerance, but not to emesis. In puerperal fever, when the lochia is suppressed, sinapisms applied to the inside of the thighs along with the vapor are useful.

### 8. *Diarrhœa, Dysentaria*;—*Prolapsus Ani, a Result.*

When the alvine evacuations are more liquid, frequent, copious, and feculant than in health, without being hemorrhagic or dysenteric, the disorder is designated diarrhœa. It is a developement of the electrical state, which is marked by increase of secretions and general debility; a state which may be excited by agencies without, and substances within. Fear, passion, terror, bad news, a blow upon the stomach, indigestible substances within the alimentary canal, and articles which excite to an increased peristaltic motion of the intestines,—these and numerous other causes and agencies may induce this phase of disordered action

of the bowels : and hence the secretions may be of all colors, odors, and consistencies.

**TREATMENT.**—The practitioner should in the first place satisfy himself that all sources of intestinal irritation are removed. This accomplished—the general treatment is the same as in cholera morbus. The diet should be bland and mucilaginous. From the absence of so called inflammation, intermittent remedies may be more promptly administered, and opiates are less generally required : and for the same reason more active astringents may be exhibited. “ Hope’s mixture ” is often serviceable ; the following is the formula.

R. Acid. Nitrici, ʒ i.  
Camphoræ Aq., ʒ viii.  
Opii. Tinct., gtt xl. M.

A table spoonful may be given every two or three hours. In chronic cases, give full doses of quinine and piperine, with tannic acid : and for the mucus discharges a solution of chlorate of potassa, two drachms to the tumbler of water, will be found useful taken to the extent of a wine glassful every three or four hours.

As an astringent, one ounce of logwood may be added to a pint of boiling water, of which a table spoonful may be taken every two or three hours : or geranium root may be similarly prepared and used. Occasionally nitrate of silver in 1-8 gr. doses may be given every four hours ; and where debility is great, the tincture muriate of iron, or the phosphate of iron.

Where diarrhœa supervenes from change of water, the following will be found of advantage :

R. Ext. Krameriæ, ʒ i.  
Acidi Nitrici, gtt xxiv.  
Tinct. Opii., ʒ ss.  
Aq. Camph., ʒ iii.  
Syrupi Simp., ʒ i. M.

A tea spoonful may be given three or four times daily. Where the discharges are milk like, small doses of lepidand. : and in marked debility of the alimentary canal, with occasional spasmodic pains, most commonly found in females, the following may be employed :

R. Morph. Sulph.. gr. iii.  
 Ferri Sulph. Exsicc, gr. xii.  
 Gentianæ Ext., gr. xlviij. M.

Divide into pil. xxiv : one three times a day for a few days.

DYSENTERIA.—This very prevalent, and sometimes epidemic fall disorder, is so well known, as to require very brief description ; we shall therefore note its general symptoms, and pass on, at once, to the treatment of the disease.

SYMPTOMS.—Violent griping pains in the abdomen, called tormina, with a sense of heat, weight, and bearing down of the rectum, whither the force of the morbid action is concentrated. There is constant inclination to go to stool, called tenesmus,—the discharges being a little mucus, or mucoid matter, tinged with blood.

In children, the pain is indicated by the peculiar cry ; and not unfrequently, the discharges are so acrid and burning, that to go to stool is dreaded, and yet the calls there-to are almost incessant, attended with prolonged straining, inducing prolapsus ani.

The febrile symptoms are remittent,—the paroxysmal period is usually from about sunset into the night ; the period of remission is marked in the morning. (*Wood*) The abdomen is very tender, more especially along the course of the descending colon.

TREATMENT.—(1.) If any causes of irritation exist, remove them by a dose of castor oil, or a laxative enema.

(2.) Subdue the magnetic determination to the colon, by the solution of cyanuret of potassa to the abdomen, and cold water enemata. During the febrile paroxysms, give small (nauseant) doses of emetine, in solution ; and apply dry cups to the spine as derivatives. Attend closely to the maintainance of an equable temperature ; never permit the attendants to expose the surface of the patient to chill,—keep up one uniform temperature around the body ; but have the room freely ventilated. (3.) Relieve the more immediate pain and distress, by the exhibition of morphine, or of Dover's powder, given in full doses, and repeated at intervals of two to four hours. As soon as the active symptoms abate, an adult may take one of the following powders, every four hours :

R. Quinæ Sulph., gr. xii.  
 Morph. Sulph., gr. ii.  
 Acidi Tannici, gr. viii. M. et div. in pulv. viii.

Where there is much acidity—the following combination is an admirable adaptation.

R. Quinæ Sulph., gr. xii.  
 Morph. Sulph., gr. ii.  
 Sodæ Bi Carb., gr. xxiv. M.

Divide into powders viii, of which one may be given every four hours : or the soda may be omitted, and pulverised charcoal, in the same proportion substituted,—thereby correcting the fetor, etc.

Where there is a tendency to dryness of the surface, sponge well with tepid water ; and give Dover's powder, (4 to 6 grs.) in lieu of the morphine in the above formulas.

The following combinations are designed to aid the young practitioner ; they are all valuable.

R. Quinæ Sulph., gr. vi.	} Mix and divide into powders vi—one every three or four hours.
Doveri Pulv., gr. xxiv.	
Rhusin, gr. xii.	

R. Quiniæ Sulph., gr. iv. } Mix and divide into six pow-  
 Viburin., gr. xxiv. } ders—one every three or four  
 Leptandrin., gr. i. } hours.  
 Rhusin., gr. xii.

P. Camphoræ Spts., 3 i. } Mix. A tea spoonful may be  
 Opii Tinct., 3 iiss. } given every two, three, or four  
 Capsici Tinct., 3 v. } hours, in mucilage of flax seed.  
 Kino Tinct., 3 i.

If prolapsus ani occurs, which is frequently the case in children, apply dry cups to the sacrum, as a derivative; cold water to the prolapsus—then carefully return the exuding membrane, and apply cold compresses.

### 9th. Verminous Affections.

It has been remarked that in the arrangements of nature, every animal becomes the prey of some other animal, which finds within or upon it a habitation, and from whom its aliment is derived. The remark is certainly true of the human animal, who is oftentimes infested externally by *ectozoa*, and internally by *entozoa*; the former exist but for a short period, the latter become permanent occupants, establishing their perpetuity by a constant increase of numbers.

We shall confine our remarks to the *ENTOZOA*, of which only three classes will be particularised; these are: (1) *Ascaris lumbricoides*, (2) *ascaris vermicularis*, and (3) *tænia*.

1st. *Ascaris lumbricoides*, characterised by a round body, tapering towards the extremities like the common earth-worm; from six to twelve inches in length,—occupying the small intestines.

2d. *Ascaris vermicularis*. This is the smallest of the

intestinal worms, resembling slender maggots, or bits of thread. They are popularly called "seat-worms," because they infest the rectum by thousands. They are troublesome in early childhood, often causing convulsions in infants, but rarely in adult life.

3d. *Tænia*,—*Soliun and lata*. The *soliun* has a long flat body, made up of distinct pieces or joints, connected by articulating ends, resembling, when separated, the seeds of a gourd. These connections are quite weak, particularly if the worm be old,—hence it is apt to come away in pieces, each of which is possessed of reproductive power. It varies in length from five to one hundred feet.

The *lata* has broader joints, shorter, and more firmly connected, and hence not so easily broken. Its length averages fifteen feet.

CAUSES.—Worms may originate in the intestinal tube from a variety of causes, as bad water, water infested with worms, the deprivation of salt. General debility and feeble health, in common with all causes of increased mucus secretion, favor their developement.

GENERAL SYMPTOMS.—Grinding of the teeth,—starting from sleep as though affrighted,—itching of the nose and ears,—capricious appetite,—alternate constipation and diarrhœa,—tumid abdomen,—habitual bad breath,—unevenness of spirits,—pleuritic or side pains,—sympathetic cough,—drowsiness,—heaviness,—often convulsions,—and vertigo. Sometimes the most marked symptom is a gradual loss of flesh; and notwithstanding the appetite is good, and abundant food is eaten, the subject literally wastes away.

TREATMENT.—Common salt is a valuable vermifuge, in doses of a tea spoonful, or two, for young children; and

two to three table spoonsful for an adult. It should be administered, in solution, (fasting) at bed time, and at least two hours before the morning meal. Water may be drank if excessive thirst is produced. Turpentine, in doses of from ten drops (child) to two drams (adult) may be administered in mucilage, followed in four hours by castor oil. Oil of worm seed, (*chenopodium*) five to ten drops, for a child, and thirty to fifty for an adult, may be repeated at intervals of four hours, until three doses have been taken; followed by a dose of castor oil. Cowhage is a popular remedy—one to two drams in molasses night and morning.

For seat worms;—give a dose of turpentine and oil, and in four hours afterwards, an enema of salt and water, solution of aloes, or infusion of worm seed.

Where tape worm is suspected, give an adult fifty drops of oil of male fern, every night and morning, and at ten o'clock each morning a full purgative of salts and senna, or of castor oil.

GENERAL REMEDIES. Pink root and senna is a popular vermifuge. We annex some additional formulas.

R. Ol. *Chenopodii*, ℥ i.  
Ol. *Ricini*, ℥ i. M.

A child, three to six, may take a tea spoonful every two hours, until it briskly purges the bowels.

R. Ol. *Chenopodii*, ℥ i.  
Spts. *Terebinth.*, ℥ ss.  
Ol. *Ricini*, ℥ i. M.

Dose, for children, as the preceding. Adults may take a large table spoonful every three hours, until purgative effects are produced.



Where there is that marked wasting of flesh already noticed, the following is a valuable combination.

R. Pulv. Chenopodii Sem., grs. xxxvi.  
Ferri Carb. Precip., gr. xlviii.  
Rhei Pulv., gr. vi to xii. M.

Divide into twelve powders, one of which should be given three times daily, soon after eating.

Where there is a verminous tendency, improve the general health by intermittents, as quinine and iron. The annexed is a useful combination, adapted for a child of from three to five years.

R. Quiniæ Sulph., gr. iv.  
Ferri Phosphat., gr. xxiv.  
Rhei Pulv., gr. vi. M.

Divide into twelve powders ;—give one every four hours for some time ; or until the general health is much improved.

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## SECTION VII.

### INTERMITTENT FEVER,—WITH RESPIRATORY MODIFICATIONS.

When the functions of the respiratory organs are borne in mind, and the important results which are dependent upon the true performance of those functions, are duly considered, it will not be requisite for us, in this connection, to occupy the time of the reader with any lengthened discussion.

Most delicate and complex in their organic structure, and ceaseless in their functional movements, it will not excite surprise in the contemplative mind, that they should be subjected to frequent interferences, or disordered ac-

tions ; nor that the results of such interferences, and disordered movements, should develop a series of morbid phenomena, of the most distressing and fatal tendencies.

Designed to reproduce and perpetuate the vitality of the stream of life, which permeates so beautifully the entire fabric of man's physical structure, we should have inferred, what the experience of ages has proved, that those developments of disease to which the respiratory organs are peculiarly liable, are amongst the most troublesome to the practitioner, and the most generally fatal to the subject, of any which are found in the records of medicine.

The above remarks apply more particularly to those phases of disease which will demand our attention before long ;—at present we must notice some of the more simple and less dangerous disorders to which portions of the respiratory apparatus are subjected.

### 1st. *Coryza and Ozæna.*

CORYZA, or cold in the head. The first sensations realised are dryness, (arrest of secretions,) fullness, and irritation of the nostrils, with frequent sneezing. Soon a copious discharge of thin, colorless, acrid fluid, supervenes,—adding to the irritability of the membrane, and excoriating the nasal orifices. The eyes become red, and watery,—the lachrymal passages are partially closed, the irritation is gradually extended, involving the frontal sinuses, and causing a sensation of fulness and weight in the lower part of the forehead. The symptoms usually reach their height in three to four days ; and the disease is sometimes (*always*) intermittent. (*Wood.*)

The physician would be more frequently consulted, not

only in this slight affection, but in others more grave, was the patient only assured that he could obtain the desired relief.

**TREATMENT.** Inhalations of laudanum or Hoffman's anodyne, diffused in the vapor of water, often afford prompt relief; and a solution of cyanuret of potassa may be applied over the bridge of the nose, with advantage. Emetine in nauseant or emetic doses, should be given if the febrile disturbance is great, with much frontal distress. In the periods of intermission, give quinine; and if much nervous disturbance, hydrocyanic acid, particularly after the subsidence of the fever, and the copious discharge of mucus which marks the resolution of the attack.

Cerate, or what is still better, glyeerine should be applied to lubricate and protect the nostrils and lip. Attend to the secretions; the diet should be simple and nutritious, and sudden changes of temperature should be avoided. Morhpine, or Dover's powder at bed time, if restless.

**OZÆNA.**—Commenees with heat, and stiffness in the nostrils, which are often closed in consequence of the thickening of the membrane; and the mucus membrane of the whole organ is often greatly swollen. The discharge assumes various appearances. It may be purulent, and of a yellowish or geenish tinge,—or sanious, and tinged with blood; its odor is not only disagreeable, but often intolerably offensive.

**CAUSES.**—It may supervene upon continued coryza,—from lodgement of foreign bodies within the nostrils,—from serofulous or syphilitic taints, or from a disordered condition of the digestive organs. The disorder has marked remissions, with paroxysmal aggravations.

**TREATMENT.**—Paroxysm and remission must receive

due attention : remittents must be exhibited in the former, and intermittents in the latter phase. Attend to the secretions—regulate the diet—avoid atmospheric changes. The nostrils may be injected with a weak solution of nitrate of silver, or the following, sufficiently diluted, may be frequently drawn up, and through the same, until the fluid is passed into the throat.

R. Sodæ Chlorin., Sol.,  
Myrrhæ Tinct., a. a.  $\mathfrak{z}$  i. M.

Where the syphilitic taint is suspected or apparent, the patient should be put under the following combination.

R. Hydrag. Bi Chioridi, gr. iii.  
Cicutæ Ext.,  $\mathfrak{z}$  ss.  
Sarsæ Syrupi Comp., O i. M.

To be well shaken, and a tea spoonful taken three times daily. In bad cases fumigation should be conjoined. For this purpose mix together cinnabar  $\mathfrak{z}$  ss., loaf sugar  $\mathfrak{z}$  i; to be placed upon a heated shovel, covered with a funnel, and the fumes conducted into the nostrils. In scrofulous cases, the iodide of iron may be advantageously employed, in doses adapted to the age of the patient.

## *2d. Laryngitis and Laryngo-Tracheitis, or Croup.*

LARYNGITIS is a disorder affecting the larynx, or head of the wind-pipe. It is attended by hoarseness, whispering, or almost total suppression of voice,—hoarse, rough, or loud breathing, with paroxysms of dyspnœa, on the occurrence of which the patient looks as though he was suffocating. There is pain in the region of the larynx, increased by pressure upon the pomum adami;—dysphagia is sometimes present, when the epiglottis is swollen and

stands erect,—and there often is a hoarse whistling cough, with expectoration of viscid mucus.

The constitutional symptoms are rigors, heat, thirst, rapid pulse, extreme restlessness, and great anxiety. Its exciting cause is exposure either of the throat or feet, to cold or wet ; or to sudden atmospheric changes.

**PROGNOSIS.** Considered very dangerous by authors ; rendered so by the treatment advised by the authorities, and adopted by the practitioner : several distinguished professional men, and not a few of our most eminent statesmen have fallen under this disease, or its treatment.

**TREATMENT.** When the disorder is slight, as we generally find it, if the bowels are at all constipated, give a prompt purgative. The throat should be gargled with cold water, and friction applied with salt and water. If more severe, apply a cold wet bandage, which should be surrounded with carded cotton, or swathed with flannel. Dover's powder five grains, every four hours may be conjoined, with a stimulating foot bath. These means faithfully followed up, will in most cases stop the further progress of the case. A full anodyne may be administered at bed-time, if indicated, and the wet bandage should be re-applied before retiring. The following morning it is only necessary to prolong the advantage gained, by the administration of quinine, with hydrocyanic acid, etc., thereby preventing the paroxysmal repetition,—not by maintaining a permanent nausea (the electrical state) by the exhibition of tartar emetic, as recommended by the authorities, but by the employment of the same agencies whereby we avert the recurrence of the ague fit.

In more severe cases, more active measures must be

employed ; but not the depletion by blood-letting, which is generally recommended by the medical authorities, and which is also, by the same authorities, declared to be powerless to arrest the paroxysmal repetition. Upon what measures, then, should the intelligent practitioner rely ? Nauseants, as emetine and lobelia, slowly pushed to emesis,—thereby reducing the turgescence of the parts, and equalizing the magnetic determination, are much more prompt, as remedial agencies, than blood-letting, and moreover have the additional advantage of leaving the recuperative powers of the system intact.

If full remission of symptoms is not, by the above means obtained, combine the tinctures of lobelia and sanguinaria, with two drops of prussic acid to each tea spoonful, to be given every two hours. Should the magnetic predominancy yet continue, a brisk saline cathartic should be administered, dry cups applied along the line of the clavicles, foot baths, and half baths should be conjoined as derivatives, and cloths wet in cold sol. of cyanuret of potassa, should be kept constantly applied to the throat.

Remission being obtained, it should be perfected and prolonged by the exhibition of the usual intermittents ; due attention being had to the paroxysmal periods.

As the disease becomes chronic, the electrical state is predominant, and the mucus secretions from the respiratory, and other organs, is largely increased in quantity. The hoarseness also is greater, the respiration is embarrassed, emaciation progresses rapidly, hectic is developed, the loss of strength is extreme, the lips are livid, etc.

A gargle of tinct. myrrh, and sol. chlorinated soda, sufficiently diluted, should be frequently employed, and half a tea spoonful of the mixture should be taken, in mucilage,

three times daily. The larynx should be daily touched with a solution of nitrate of silver, 10 to 30 grains to the ounce, applied with a charged probang. Bals. copaiva, or iodide potassa, should be given, and quinine, piperine, etc., in appropriate doses.

To relieve the breathing, lobelia and prussic acid, or lobelia, sanguinaria and emetine, should be administered during the paroxysms. Of the first, the following are suitable proportions ;

R. Tinct. Lobeliæ, ʒ i.  
Hydrocyanici Acidi, gtt. xvi. M.

Half a teaspoonful every fifteen minutes, or as indicated. Annexed is the formula for the last named combination :

R. Tinct. Lobeliæ,  
Tinct. Sanguinariæ,  
Vini Ipecac., a. a. ʒ ss. M.

A teaspoonful may be given pro re nata.

LARYNGO-TRACHEITIS, or Croup. This very common disorder is amongst the most serious to which the respiratory functions are exposed, It is a disease of childhood, and of the vernal and winter seasons, although it may be occasionally found at any period of the year. It may present merely as a spasmodic affection, or may be marked by an intense magnetic determination to the larynx and trachea, upon whose surface a plastic lymph exudes, soon becoming organised, and developing that greatly too fatal affection, *true*, or *membranous* croup, The former is characterised by sudden spasmodic breathing, cough, and crowing, or croupy respiration. It most usually occurs at night.

In the membranous modification, a peculiar hoarseness, attended with a hoarse cough, is observable for some days

before the attack. The paroxysms are usually at night, and the remissions are so well marked the following morning, as almost wholly to dispel the fears of the mother. In some cases, the characteristic hoarseness and cough only present a few hours before the attack is fully developed, and the tonsils are at once covered with fibrous patches, stretching back into the larynx,—or whitish spots or streaks may be seen in the back part of the throat: in all such cases be on the alert,—membranous croup is at hand.

The glottis is soon contracted and obstructed,—hence the characteristic hoarse cough, and hissing or crowing respiration, which sound the note of alarm to the terrified mother: the air *hisses* or wheezes through the larynx, and is heard over the whole room,—sometimes the whole house.

The great mortality of true croup, is admitted generally by the authorities, but when the treatment advised by them (Dr. J. Meigs, excepted) is borne in mind, the great mortality will no longer excite surprise.

What are the measures almost universally recommended? *The most active depletion*; bleeding, cupping, the application of leeches, blisters, calomel in purgative doses, and *continued* antimonial nausea, even unto faintness! if not coma! These heroic measures seldom remove the disease, but they do in most cases cut short the thread of life of the tortured sufferer.

We are opposed to blood-letting, from the admissions of the most eminent of the authorities, who after recommending its employment, say that croup is the “most fatal of all diseases;” (*Watson.*) that “bleeding has not the power of arresting this specific inflammation, and generally terminates fatally, though venesection has been



pushed to the utmost extent ;” (*Guerent.*) that it has “ no effect in the prevention of false membrane ;” (*Bretonneau*) that it does not “ obviously arrest the disease.” (*Valleux.*)

We oppose the administration of antimony, because the authorities assure us that it is not only useless, but dangerous, frequently inducing the most alarming and fatal prostration ; indeed it has been the cause of death. (*Meigs.*) Wood describes a case wherein the administration of antimonial wine prostrated the child beyond recovery ; and such instances are by no means of rare occurrence. It also acts most injuriously upon the gastro-enteric mucus membrane ; and where it is pushed until purgation results, the stools become white, as in malignant cholera.

We are opposed to the exhibition of calomel, because in the hands of the most heroic practitioner who has ever recommended its employment, it fails to effect the indication for which it is administered.

“ The mercurial treatment of croup is insufficient and unnecessary ;” (*Stokes.*) “ It is assuredly uncertain, and liable to occasion *inconvenience*,—viz, dangerous salivation which at times is uncontrollable, and productive of serious local mischief, and occasionally death.” (*Dunglison.*) Such admissions might be multiplied, but the above citations are sufficient to prove the non-utility of the calomel treatment, although Wood and Elliotson advise its exhibition “ with the greatest freedom.”

Notwithstanding the free depletion of the poor sufferer, by the conjoined influence of bleeding, antimony, and calomel, “ all may have been inefficiently employed,” or “ the tenacity of the complaint may have been such as to

resist the best directed efforts." The system is now too much enfeebled to admit of further depletion; and the child is threatened with momentary suffocation from the profuse mucus secretion. "*Now it is* that the nervous stimulants and stimulating expectorants are to be employed, while our anti-phlogistic efforts must be conjoined to external revulsive measures." (*Wood.*) Deplete so long as depletion can be effected; and when the child is about prostrated to death's door, *then*, and not until then, make any effort to sustain the life powers. "When the strength has become exhausted, our hopes must rest on stimulants. The only chance *now* is to support the strength, in the hope that the false membrane may be spontaneously loosened and discharged." (*Wood.*)

TREATMENT.—What then is the proper treatment of this dreaded disorder? a treatment which can alone promise a successful result?

We have proved that bleeding, antimony, and calomel, do not meet the alarming indications in this distressing disorder; that they do not favorably affect the suffocative breathing of the little sufferer. The child struggles for breath; its head is tossed from side to side, in the vain effort to overcome the impending strangulation; the lips are already purpled, and the eyes almost starting from their sockets, just as the hanging man appears. What madness to tamper with life,—to waste the precious moments by the administration of purgatives, and the application of leeches and blisters! to induce prostration, and thereby increase the risk of suffocation! The child struggles for breath,—to relieve its breathing is *the first*, the all important indication; and for this purpose we give the prussic acid in one, two, or three drop doses; the effect is almost

magical ! the child almost instantly breathes with greater freedom. Conjoined with prussic acid, a prompt emetic should be administered ; not an impressible and prostrating nauseant, as antimony ; but an agent acting *at once*, and productive of little depression. For this purpose, the sulphate of zinc is incomparably the best. Emesis is promptly effected,—give warm water freely, and keep the child from chill. Next cautiously administer chloroform ; let the atmosphere be charged just sufficiently to induce sleep. By these means the relief is “sudden and complete,” or in other words remission has been obtained, and the child saved. To prevent paroxysmal repetition is the next indication. When the child awakes, give quinine in doses of from half a grain to a grain and a half, every two to four hours ; and prussic acid 1-2 drop to two drops, at the same intervals. During the day, a teaspoonful of the following mixture should be administered at short intervals, to subdue the cough, and to prevent the accumulation of the plastic secretion :

R. Emetine, gr. ii  
 Potassæ Carbon., gr. xxxii.  
 Aquæ, ℥ ii. M.

Unlike the authorities we have named, we do not madly attempt to prevent paroxysmal repetition, by prolonging “nausea, to faintness,” nor do we allow the remission period to pass by unimproved. The remissional nature of croup does not escape the observation of the old school practitioner ; and yet although they admit that “the child is never safe from relapse,”—that the “disease is very liable to return,” yet not a word do they say about the prevention of the paroxysmal repetition, by any other means, than the continuance of active and depleting

nauseants ; these depleting agencies are advised as well in the period of depression, as in the febrile paroxysms !  
*Pro pudor scientiæ.*

With the acid, or the emetic, should be conjoined hot foot baths,—and should the emetic require repetition, alum in the dose of a tea spoonful may be administered in molasses, to a child eighteen months to two years old, without any resulting prostration ; (*Meigs*) but the alum possesses no advantage over the sulphate of zinc. A cold solution of cyanuret of potassa should be applied to the throat at the onset of the attack. A suitable cloth, several times doubled, should be saturated therein, and made to encircle the throat three or four times, and the whole enclosed in a thick fold of cotton batting : the application should be retained during the continuance of the paroxysm. This application, alone, has in several marked cases afforded immediate relief.

For local applications, a strong solution of nitrate of silver may be used ; (*Green*) or sulphate of copper.—(*Mitchell.*)

### *2d, Pertussis,—Hooping Cough.*

This common phase of intermittent disorder takes its popular name from the peculiar noise, or sound, by which the cough is characterised.

**SYMPTOMS.** The cough is paroxysmal, occurring in violent fits which become more intensive, until terminated by the long deep whoop which marks the disease. The paroxysms are again and again repeated, until a quantity of viscid phlegm is freely expectorated, or the child vomits. At the height of these paroxysms, the face becomes

red, sometimes almost black, the eyes are suffused with tears which flow freely down the cheeks; the conjunctiva is gorged with blood, which sometimes gushes from the mouth, nose, and ears. The paroxysms vary greatly in number in the twenty-four hours; they may be most frequent either in the morning, or the evening portion of the day.

The Prognosis is always favorable, unless complicated with bronchitis, pneumonia, etc. Convulsions sometimes occur, which are often troublesome, and occasionally dangerous.

**TREATMENT.** During the paroxysm, the cold dash upon the face and breast, with brisk friction, is serviceable. Prussic acid, alone, or combined with tincture of lobelia, is very useful. If the oppression is great, and respiration difficult, a full emetic should be administered. The following mixture will be found very advantageous.

R. Emetin. Syrupi, (gr. xvi to 0i.)  
 Senegæ Syrupi., a. a. ℥ i.  
 Potassæ Carbon., ʒ i,  
 Coccinellæ Pulv., ʒ ii.  
 Sirupi Simplicis, vel Tolutani, ʒ ii.  
 Hydrocyanici Acidi, gtt. xvi. M.

A tea spoonful every two, three, or four hours, may be given to a child two to three years old. Tinct. of assafætida ʒ i to ii may be added to the above, if the spasmodic tendency is prominent.

R. Aluminæ et Potass. Sulph., ʒ i.  
 Zingib. Syrupi, ʒ i.  
 Acaciæ Mucil., ʒ ii. M.

A tea spoonful may be given every three or four hours, to a child of from two to three years.

If the child is pale and feeble, a solution of the nitrate

of iron and quinine may be appropriately administered in the intermissions; and in ordinary cases, small doses of quinine and prussic acid should be exhibited between the paroxysms.

When the paroxysms are marked by a high febrile condition, and bronchitis or pneumonia is complicated, with *short* and oppressed respiration,—nauseants, to emesis, should be administered,—and conjoined therewith, the foot bath, sinapisms to the chest and between the scapulæ, and prussic acid will be advantageous. Sometimes a cold application to the chest will afford great relief; and for this purpose the solution of cyanuret of potassa (3 i. to 0 i.) is to be preferred.

When convulsions occur, pour cold water upon the head, put the feet and legs into hot sinapised water, administer a lobelia enema, give prussic acid, and if severe, employ chloroform. When the convulsions have been subdued, intermittents, quinine, and morphine, are indicated, to avert their repetition by strengthening and tranquilising the nervous system.

The child should be guarded from atmospheric changes, but not confined to the house in appropriate weather,—it should be warmly clad, and the diet should be nutritious, but not stimulating. Attention should be had to the secretions; and the surface of the body should be washed in tepid or cold water, at least once daily.

### 3d. *Asthma.*

This modification of disease is marked by a characteristic spasmodic difficulty of breathing; the spasm is principally confined to the respiratory apparatus situated below

the trachea, and is seldom complicated with any organic change of structure ; it is hence but rarely fatal.

**SYMPTOMS.**—True asthma is marked by severe constriction of the chest, with loud and wheezing respiration, attended during the paroxysm with a short and difficult cough.

The attacks most commonly occur during the night, and at the time when the life forces have fallen to their minimum point,—about 2 o'clock.—The patient awakes with a sense of suffocation, and often rushes to the window for air, when he usually soon finds relief. The paroxysm is repeated the following night, or in the language of Wood, “this alternation of exacerbation at night, and remission in the day, is repeated for several days” inducing the patient to sit up until after the attack. Hence the intermittent and periodic character of the disorder is indisputable ; indeed it is not denied by the authorities. In some cases the paroxysms are repeated only at certain seasons, or at certain localities ; and they are sometimes only induced by certain states of the atmosphere, or when the wind blows from some defined point. During the paroxysm, Wood says the urine is pale and abundant ; but so far as our observation has gone, the urinal flow has always followed or preceded the attack ;—the increased secretion being the attendant upon either the period of preceding depression, or the period of reaction.

**CAUSES.**—Hereditary predisposition,—cold damp weather,—fogs.—Sometimes cold weather excites the paroxysmal attack,—in other cases it is induced by warm weather only, as the electrical or magnetic state may be predominant. Some persons are asthmatic only in cities, others

in the country only ; and sometimes the attack may be averted by position.

Phases of disorder simulating asthma, may be developed by recession of eruptions, suppression of habitual, or natural discharges, hemorrhoids, etc.

**TREATMENT.** As soon as the paroxysm is manifested, give a table spoonful of the saturated tincture of lobelia, with five drops of prussic acid, and repeat in twenty minutes if required. If the constriction of the chest is severe, or prolonged, apply dry cups between the scapulæ, aided, if requisite by a sinapism, or friction with Granville's liniment. By these means a remission of the paroxysm is at once obtained, which should be followed by prompt intermittents, as quinine, iron, etc. Frequent frictions, the shower bath, attention to diet, and to the regulation of the secretions, are all of importance.

If the patient has a saturated tinct. of lobelia, and prussic acid, at hand,—the thousand and one prescriptions, including match paper, strong coffee, stramonium leaves, skunk cabbage, indian turnip, etc., etc., will never in any case be needed, and seldom indeed will the practitioner, who adopts this rational mode of treatment, find his patient subjected to the perpetuated paroxysms of this distressing disorder.

#### *4th. Bronchitis,—Acute and Chronic.*

Acute Bronchitis is a magnetic determination to the air passages below the trachea,—vulgo, inflammation of the ramifications of the bronchi, and is often mistaken for inflammation of the lungs, so-called.

A large proportion of cases called bronchitis, are noth-



ing more than chronic laryngitis, or irritation of the mucus membranc of the larynx, evidenced by the localisation of the disordered action.

**GENERAL SYMPTOMS.** Altered sense of coldness of air,—slight pectoral uncasiness and constriction,—respiration accelerated and oppressive,—the patient is “worse evenings,”—cough at first hacking, but eventually becoming severe,—dry for a day or two, then humid,—expectoration serous, transparent, whitish, and ropy. In more advanced cases, the patient is unable to lie down by reason of the increased respiratory oppression. The mucus secretion rapidly increases, the cough becomes violent and persistent, emaciation progresses apace, night sweats set in, and the patient soon sinks, worn out by hectic.

**TREATMENT.**—The authorities thus sum up the treatment of this disorder,—“Bleed the patient freely—follow up by local-bleeding—after that, calomel is of the greatest use.”

On the contrary, we maintain that the above authoritative practice is never of any permanent advantage to the patient. In the front rank amongst remedial agents, we place nauseants or emetics, because they directly tend to equalise the magnetic force, and to remove the abundant viscid mucus, which by partially closing the bronchial tubes, causes the respiratory difficulty. Remission having been attained, it is only requisite to perfect and perpetuate it, to restore the patient to health; and this can only be effected by the administration of constitutional remedies; remedies which influence, through the brain and nerves, the totality of the whole system. We have already referred the practitioner to those general principles of treat-

ment, and the remedies which are equally applicable in that modification of disease now under consideration.

Should the febrile paroxysm return, recourse must be again had to the remittents ; the following is a useful combination.

R. Emetine Syrupi,  
Lobeliæ Tinct.,  
Sanguinariæ Tinct., a. a.  $\mathfrak{z}$  i. M.

A tea spoonful may be given every five or ten minutes until the remission is obtained ;—large dry cups are also often serviceable to change the direction of the magnetic determination ; and for the same purpose sinapisms, foot-baths, etc., are of advantage.

As an expectorant, any of the following combinations may be employed :

R. Emetine Syrupi,  $\mathfrak{z}$  ii.  
Lobeliæ Tinct.,  $\mathfrak{z}$  i.  
Hydrocyanici Acidi, gtt. xlvi. M.

A large tea spoonful may be given every two, three, or four hours.

R. Scillæ Syrupi,  
Senegæ Syrupi, a. a.  $\mathfrak{z}$  i.  
Opii Tinct.,  $\mathfrak{z}$  i. M.

A tea spoonful every two to four hours.

The following is often of advantage : to half a pint of boiling water, add one ounce of boneset, and one drachm of senega root : stand until cold, and give a table spoonful frequently.

Astringent gargles may often be very serviceable : alum and nitrate of silver are amongst the most generally available.

**BRONCHITIS, CHRONIC.**—The diagnosis is obvious ; absence of severe pain, and of those symptoms which are

manifested by so-called "chest diseases." In the chronic stage, there is thickening, to a greater or less degree, of the cartilaginous rings of the bronchi, which are enlarged, and enveloped thickly by the characteristic secretion.

Before pronouncing a diagnosis, the uvula should be examined, to ascertain if its elongation is not the source of the long continued cough, so often dependent upon the irritation its prolongation induces.

Where such change of structure exists, the uvula should at once be restored to its appropriate state, by the excision of its abnormal length. After the operation, gently stimulating and astringent gargles should be employed,—the following is an appropriate combination.

R. Sodæ Sol. Chlorinat.,  
Myrrhæ Tinct., a. a.  $\xi$  i. M.

A tea spoonful, in half a wine glass of cold water, should be used as a gargle, several times daily,—and a portion of the fluid, should be allowed to pass slowly down the throat.

TREATMENT.—Attend to the general secretions. Where much mucus exists, administer an occasional emetic, or a nauseant and stimulating expectorant, combined with carbonate of potassa. Subject the patient to the exhibition of appropriate intermittents, as quinine, piperine, hydrocyanic acid, etc. Attend to the condition of the external surface; maintain a uniform temperature, and true functional action, by the employment of tepid baths, spongings etc. Where the surface is cold, use dry friction, or friction with salt and water.

In cases where the mucus membrane, or rings of the bronchi are thickened, combine with the intermittents iodide of potassa, iodide of iron, etc.; and conjoin therewith some stimulating gargle. A plaster of galbanum should be

applied to the interscapular spine, if the patient complains of chills.

We annex a formula for the treatment of chronic bronchitis, which has, in our hands, been productive of the greatest benefit in numerous marked and long continued cases.

R. Rhusine, grs. c.  
Hyoscamine, grs. xxx.  
Prunine, grs. l.  
Alcoholis, ℥ ii.

When dissolved, the tincture is ready for use. The dose is from five to ten drops, three to six times a day, on a small lump of white sugar. If required, leptandrin (1·8 to gr. 1) may be administered daily, at bed-time.

#### *5th. Pneumonia.*

This disorder is marked by intense magnetic determination to the parenchymatous structure, or to the substance of the lungs, which, when unarrested, progresses through the several phases of engorgement, red hepatization, purulent infiltration, and occasionally the stage of abscess.

This magnetic determination may be confined to the vesicles of a lobule, to a lobe, to one lung, or to both,—and is respectively called lobular, lobar, single or simple, and double pneumonia;—when the pleura is implicated, we then have the disease known as pleuro-pneumonia.

GENERAL SYMPTOMS. Chill, more or less severe, followed by febrile reaction,—difficult respiration,—breathing rapid and oppressive,—deep seated pain, increased both by inspiration and expiration, with cough and severe pain in the side or back part of the chest. “The fever has a remittent character,—the exacerbations occurring

daily, for the most part toward evening, and accompanied with an increase of cough, pain, dyspnœa and bloody expectoration.” (*Wood.*)

The phlegm is at first viscid, and of a slight iron rust color, and often expectorated in one gelatinous mass. Deep circumscribed redness of cheek of a peculiar flush, or hue. Decubitus dorsal, one position generally maintained. “Prune juice” expectoration marks the further advance of the disease, with sudden and great prostration—pulse and respiration both more hurried and irregular—face haggard—eyes sunken and wild—delirium—death.

DIAGNOSIS.—In the philosophical treatment of the case, it is of little consequence to contradistinguish *Pneumonia* from *Pleuritis*.

DURATION AND PROGNOSIS.—Both vary, and depend wholly upon the treatment of the case. Authors say the disease runs from seven days to three weeks, and is difficult to arrest, and cause resolution to take place, until it passes into the second stage,—i. e., venesection; calomel, antimony, etc., which they so strongly recommend, will not arrest the progress of the disease, or procure a resolution of the disordered action.

CAUSES.—Exposure to cold or damp, predisposition, or inherent weakness of the lungs, inducing catarrhal affections, etc.

TREATMENT.—Read any “text book,” or systematic treatise on practice in relation to the treatment of pneumonia, and it will be found that the whole is summed up in three ominous words,—“bleeding, calomel, antimony.” It is hence, to our mind, no marvel that these learned doctors are compelled to call pneumonia a “very fatal disease;” no wonder that they manifest sundry misgivings

about the correctness of their practice. And yet the bug-bear *inflammation* is ever present to their mind, is ever foremost in their thoughts,—and associated therewith is the ever recurring lancet, the calomel bottle, and the antimonial solution,—advised to keep down the circulation, and to arrest adhesive inflammation—whilst the anti-phlogistic regimen is conjoined, thereby preventing recuperative action.

Let the authorities speak for themselves upon this subject. Says Prof. Wood,—“Bleed from sixteen to thirty ounces, and if the symptoms abate not, bleed again, and the operation may be repeated again and again.” To these repeated bleedings, calomel and jalap, and salts and senna are to be conjoined, with 1-4 grain of tartar emetic every two hours, or hour. After two or three days, when the circulation is sufficiently reduced by the lancet, and the application of cups, one grain each of ipecac and opium, and two or three of calomel may be given at night; and if the disease proves obstinate, recourse must be had to mercurial impression! Nothing whatever of the marked *remissions* and *exacerbations*, excepting in the bilious modification!

Watson recommends bleeding after bleeding; bleeding repeated two or three times in twenty-four hours; leeches in large numbers, and cupping glasses as an auxiliary to the lancet; the back and chest to be covered with “waist-coats and breastplates” of blistering plaster, and thinks he need scarcely say that the whole of the anti-phlogistic regimen must be rigidly enforced! Who can blame us, when, with Surgeon Cooke, we assert that such “authoritative” treatment is “routine slaughter?” Let Dr. Jackson, of Boston, describe the result of the regular practice,

in the treatment of this disease ; he says “ redness, soreness, and even pustules were produced in the fauces,”—and, adds Dr. Cotting, “ autopsies revealed pustules throughout the alimentary canal,”—and, we add, that it is indisputable, that from the treatment thus authoritatively recommended and adopted, *the lungs have also become pustular*, giving the physician occasion to change the name of the disease from pneumonia to phthisis.

The present affords us a favorable opportunity to express our views upon the fallacy of the self-limitation of disease ; a doctrine which has gained importance from recent statistical tables compiled by Dr. Diettz, in relation to the treatment of pneumonia. From those tables we transcribe the following : 85 cases were subjected to the routine lancet, calomel, and antimony treatment ; 106 to contra-stimulants, and 189 to dietetics alone

The following is the comparative fatal result.—20.4,—20.7,—and 7.4 per cent., and from these facts it has been asserted that pneumonia,—in common with many other diseases—has a tendency to self-limitation after the occurrence of a certain number of paroxysms.

That diseases have a tendency to become exhausted under the recuperative powers of the system, is not denied, but in all such cases, their limitation, or duration, is determined by the powers of the organism to overcome the febrile disturbance upon which the disease depends for its perpetuation. Disease is a simple repetition of disordered action, manifesting throughout its whole course paroxysm and remission. If disease is continued from day to day, or from week to week, it is because—as the disorder progresses—the paroxysm or exacerbation becomes, with each repetition, longer in duration and more severe in

character—the remissions at the same time becoming shorter and less marked.

Disease is limited from two causes,—first, the power of the *vis medicatrix*, whereby the paroxysms are controlled, and the intermissions prolonged into convalescence and health; and second, by the inability of the recuperative powers to resist and overcome the paroxysmal disturbance; when, as a natural consequence, the paroxysms are repeated and intensified, until the patient sinks beneath the disorder. But this is not *self-limitation*, as understood and claimed by the schools.

When the “legitimate” treatment of pneumonia is borne in mind, is it any wonder that the public should fly therefrom, to any system of practice which promises escape from the “routine slaughter” of the regular schools?—Nay, is it not rather a wonder that the “regular practitioner” should ever be called in at all? asserting, as he does, that “inflammation, or congestion” is the basis of all disordered action, and that bleeding, blistering, and salivation—if the “disease proves obstinate”—are the only reliable curative agencies? means which are to be pushed until nature is ready to give up the contest, and all prospect of favorable reaction has disappeared? and then, and not until *then* are so called “tonics” admissible, —if haply by their administration the patient may be saved, not from disease, but from dying outright.

How widely different the treatment to be adopted, in the light of paroxysm and remission, as proclaimed in those doctrines which recognise the intermittency and periodicity of all disease. With “the periodic clue” to guide us in our therapeutical administrations, medicine ceases to be a conjectural mystery, and at once assumes all the dig-



nity of a veritable science. In the light of that science, the localisms of disease are comparatively valueless; we ask not the kind of local morbid action which may be most prominent. We investigate the manifestation of disease in relation to its paroxysmal character; we seek out intermittency, its remissions and periodicity. Thus guided, our treatment becomes at once clear, effective, philosophical. No matter where, or what may be the localisation of pain, the most prominent development of the disordered action, it is resolvable into a simple case of remittent, or intermittent fever, with local developments, and becomes at once amenable to that treatment which is based upon the doctrine of paroxysmal repetitions.

But will pneumonia yield to this treatment? Let Dr. Todd answer the question, Dr. Todd the colleague of the great Dr. Watson. Well, Dr. Todd says "it is curable by emetics and quinine," that is by the appropriate and timely administration of electrical remedies in the paroxysmal period, and magnetic remedies during the period of remission.

We adopt the following treatment, and after many years of observation and experience, we commend it to the young practitioner :

1st. Obtain a remission of the most marked manifestations of disordered action; for this purpose emetine, gr. i. water ℥ i., should be administered in tea spoonful doses, every five minutes,—first, to produce impressible nausea, and second, emesis,—which should be aided by copious draughts of tepid water. At the same time apply the cold wet sheet to the chest, around which wrap a flannel bandage, or small blanket. After the emetic action, if requisite, administer chloroform; or the patient may be chloro-

formed before emesis, if the pain and difficulty of respiration are very severe. Remission secured, give two to three drops of prussic acid, and 1-4 gr. morphine, every four hours, alternating with quinine in two to four grain doses, so that the remedies may be exhibited alternately, at intervals of two hours. Keep a sharp look out for the paroxysmal repetition, and avert it, if possible, by a full anti-periodic : but should it re-occur, repeat the remittent remedies.

If the pain in the chest is severe, substitute for the cold water, a solution of cyanuret of potassa, about ℥ ii. to the pint. When the paroxysmal repetitions have been overcome, citrate of iron may be conjoined with the intermittents, and if any cough remains, a sedative expectorant may be administered. The following is a good combination :—

R. Emetin. Syrupi, ℥ ii.  
Sanguinariæ Tinct., ℥ ii.  
Tolutani Syrupi, ℥ ii.  
Hydrocyanici Acidi, gtt. xxxii. M.

Forty to sixty drops of the above (well shaken) may be administered in a wine glassful of mucilage, three to six times daily.

When solidification has resulted, either from injudicious treatment, or the continued paroxysmal repetitions, the iodide of potassium, or the proto-iodide of iron, may be advantageously conjoined with the general intermittent treatment.

SYNOPSIS. Nauseants, emesis, chloroform, foot baths, dry cups, cold water, or solution of cyanuret of potass to the chest, prussic acid, morphine, quinine, citrate of iron, iodide of potassa, or proto-iodide of iron, where solidification is suspected.

*6th. Pleurisy.*

A magnetic determination to the pleura,—a serous membrane lining the cavity of the thorax, and reflected over the lungs, so as to invest them.

This determination may be primary, or secondary ; it may be primary and non-complicated ; or secondary, supervening upon bronchitis, pneumonia, or phthisis.

Its acute, or primary manifestation is preceded by chill, or rigors, followed by a febrile paroxysm, and the development of sharp pain. The disorder “undergoes a daily remission and exacerbation, the former occurring in the morning, the latter towards evening.” The pain is “observed to increase and decrease along with the exacerbations and remissions.” (*Wood.*) Thus the authorities unwittingly become our best witnesses,—they prove for us the truth of our doctrines, that all disease is periodic, and remittent or intermittent, for remission is an imperfect intermission, which only requires the addition of an appropriate force to enable the recuperative powers to overcome the paroxysmal disorder.

GENERAL SYMPTOMS. Acute, sharp, lancinating pain below the mammary region, largely increased by the respiratory effort,—respiration is hurried and short, as though the breath was suddenly cut off, inducing oppressive dyspnoea, accompanied with a dry hacking cough.

Effusion is ascertained by the presence of ægophomy, enlargement of the side, dulness, loss of respiratory murmur, etc.

TREATMENT.—The remarks made in connection with pneumonia, apply with equal force to the “authoritative”

treatment of pleurisy. The whole treatment may be comprised in the following words,—frequent bleedings, leeches, blisters, mercurialisation, starvation,—these says Elliotson,—and he utters the general views of the regular practice,—“ will cure it.” Most heroic, and sublimely simple practice.

What are the true indications? To procure and perpetuate a remission of symptoms, and to prevent paroxysmal repetition.

For these indications nauseants and chloroform inhalations, solution of cyanuret of potassa, (℥ ss to O i) stimulating foot baths, and dry cups externally. Sometimes dry cups will afford more prompt relief than the above solution, and occasionally the solution applied hot, or a sinapism will be most advantageous.

If “ bilious ” symptoms are present, indicated by bitterness of the mouth, nausea, or vomiting of biliary matter, give a cathartic of podophylline gr. i, leptandine gr. ii,—and repeat every two or three hours as indicated. Dover’s powder gr. xii to xv. at bed time, to secure sleep, and allay nervous restlessness.

As soon as remission is obtained, prussic acid gtt iii, and morphine, gr. 1-6—should be administered every four hours, alternating with quinine in doses of from one to three grains. If any tendency to paroxysmal repetition, the remittents should be repeated; but the paroxysm may usually be averted, by the exhibition of a full anti-periodic, an hour before its expected recurrence. The following is generally available. Morphine, gr. 1-3, prussic acid, gtt. iv, in a wine glass of water.

**CHRONIC PLEURITIS.**—The practitioner will frequently meet with cases wherein there is always more or less pain

in the left side, severe cough, profuse expectoration, great wasting of flesh, hectic, and night sweats,—cases frequently mistaken for phthisis pulmonalis, and upon the cure of which, charlatanism frequently gains credit and reputation.

The indications are to restore the general health, by attention to the secretions ; and more especially the uterine secretions, when the patient, as is most frequently the case, is a female.

For this purpose close attention should be had to the paroxysmal phases. The general treatment includes sedation, and the exhibition of appropriate intermittents. When the hectic is marked, nauseant doses of emetine, with a small proportion of lobelia, if the respiration is at all oppressive. A full sedative at bed-time, with aromatic sulph. acid, gtt. x to xxx, if the night sweats are profuse. Cold sponging, and brisk friction immediately upon rising in the morning. Prussic acid, gtt. i to iii, every three or four hours, with small doses of quinine, gr. ss. to iss, alternating therewith.

Proto-iodide of iron, (the syrup) or the citrate of quinine and iron, are both available remedies. As a sedative expectorant, the following mixture will be found very useful :

R. Ipecac. Vini,  
 Ant. Tart. Vini, a. a. ʒ iss.  
 Sanguinariæ Tint., ʒ ii.  
 Pruni Virginianæ Syrupi, ʒ iv.  
 Morph. Sulph., gr. iv. M.

Forty to eighty drops for males, and thirty to sixty for females, from three to six times daily.

Where the uterine secretions are deficient or suspended, in addition to the employment of general remedies, those should be conjoined whose elective affinity is marked to

that organ. Caulophilline, (gr. i to iii.) and macrotine, (gr. ii. to iv.) with small doses of aloes, (gr. ii. to v.) and a full iron combination, should be employed for a week preceding the expected functional movement. The annexed is a very valuable combination :

R. Ferri Carbonatis, ℥ ss.	} Let the strychnine be dissolved in the essence, before adding it to the mixture.
Cicutæ Extracti, ℥ ii.	
Tanacetæ Essentiæ, ℥ i.	
Strychnine, gr. i.	
Aqua, ℥ iii. M.	

Of the above, a small table spoonful should be administered three times daily, in connection with the caulophylline, etc. above named.

If the pain is nearly constant, or diffused over the chest, contra-stimulation may be advantageously employed. A rubefacient plaster between the shoulders is useful, and the following ointment should be freely rubbed upon the chest, night and morning, until vesication is produced :

R. Ipecac Pulv., ℥ ii.  
Unguent. Simp., ℥ i. M.

The above ointment is more effective than the ointment of antim. tart., and does not produce those serious ulcerations which so often follow the employment of that disgusting agent.

By a close attention to the individualism of each case, and to the exhibition of the remedies as indicated, the practitioner will rarely fail in restoring the patient to renewed life and health.

### 7th. *Phthisis Pulmonalis.*

We frequently, (alas too much so,) find persons in whom the electrical forces preponderate,—and when that

predominancy is by predisposition determined to the lungs, we have what is called the tuberculous predisposition. This predisposition is commonly complicated with a second tendency to degeneration of structure, known as the scrofulous; and from this coincidence, the scrofulous and tuberculous diatheses have been almost universally confounded. We consider the consumptive diathesis as dependent upon a primitive defect in the nutritive process, whereby assimilation and vitalisation are imperfectly performed; and from this cause we are of opinion that the tuberculous deposit, and the consequent process of degeneration arises. Hence it is apparent that this dreaded disease is not a primitive ulceration of the lungs, although ulceration is the result of those causes which induce the degeneration, or loss of vitality of the parts subjected thereto.

The disease is well expressed by the word *Οθίω*—"to consume,"—and its fearful ravages have consumed the fairest and largest portion of the adult race, as is evidenced by the weekly bills of mortality in all our large cities and towns.

From the preceding remarks, it will be evident that we do not favor that theory or hypothesis of tuberculous deposit, and ulcerative degeneration, which has been called the inflammatory; indeed the whole character of the incipient development of the tuberculous habit is marked by a deficiency, rather than an excess of vitality; and inflammation is maintained to be an abnormal determination of vitality to the affected part. In corroboration of these views, it is well known that an excess of vitality determined to a given part, induces super-sensation, or pain in the part so influenced; whereas the process of degeneration and ulceration may have progressed to the almost destruc-

tion of a lung, before the patient has realised his danger from any marked increase of super-sensation, or pain.

**GENERAL SYMPTOMS.** Short tickling cough, which the patient either denies, or attributes to a cold,—stitch in the side,—slight indications of hemoptysis,—cough worse morning and evening, with some expectoration,—breathing begins to be impaired,—flesh softens, becoming flabby,—calves of legs, and chest incline to cold sweats,—frequent chills and hot flashes,—the patient is extremely susceptible to atmospheric changes, is almost literally a living barometer—sputa brownish in color, and occasionally streaked with blood,—or frequent attacks of hemoptysis.

*2d. Stage.* Cough increases,—more dyspnœa—marked debility,—strength and flesh rapidly reduced,—menstrual secretion becomes pale, scanty, or ceases—the nails are incurvated, the fingers tapering,—hands thin and transparent,—complexion fair and waxy,—eyes become unnaturally bright,—hair softens and is difficult to keep in order, and soon falls out,—the sputa becomes green, yellow, more abundant, sometimes fetid, and sinks in water; shreds are seen in it, of a white curdy appearance,—strength greatly reduced,—copious perspiration. The tongue is often remarkably natural, but more generally the tip and edges are red, like raw beef, or covered with a foul yellow mucus.

*3d. Stage.* Hectic flushes morning and evening, the middle of the day chilly,—thus evidencing periodicity of disordered action,—colliquative diarrhœa,—pulse accelerated after meals,—mind and appetite usually unimpaired to the last,—full of hope of recovery, and generally lively and joyous. This mental state is peculiar to this most deceptive disease; even physicians, with colliquative diar-



rhœa, and profuse night sweats, have denied, in their own cases, the existence of the disease, until hope was quenched in death.

From the views we entertain of the tuberculous predisposition, we are not surprised to find, in many cases, much tenderness of the epigastrium, ulceration of the intestinal glands, scrofulous deposits in the folds of the mesentery, and other marked evidences of functional digestive disturbances.

Of late years we have heard much of the stethoscope, ascultation, and percussion,—and of the varied phases of structural changes they have revealed,—to each of which some distinctive nosological appellation has been given. But with all the new light supposed to be afforded by Laennec's divining rod, we yet see no greater success in the treatment of the disease, and no reduction of its appalling mortality. Where then the advantage of the stethoscope, if its assumed revelations are of no practical value in the treatment of the case, and the restoration of the patient to health and usefulness? Echo answers, where !

CAUSES.—Hereditary predisposition, dependent upon an inherent weakness of the structure of the lungs, and developed by exposure to atmospheric changes, night parties, sleeveless dresses, and soleless shoes. To these may be added impure air, and indigestible food. Eruptive diseases are active agencies in the development of the latent predisposition; and every thing which has a tendency to depress the life powers, as excessive or long continued mental and physical exertion. The inhalation of fine particles of dust into the lungs, is a common developing cause.

TUBERCLES.—What are they? For the necessary lu,

brication of the mucus membrane of the cells, and other air-passages of the lungs, there must be secretion ; and for the supply of this secretion there must be glands. Hence we find a number of minute and almost imperceptible glands interspersed through the entire tissue of the lungs—the pulmonary tissue as it is called—and which are most abundant in their upper portion,—that very portion in which pathologists suppose they have detected the commencement of consumption. But this commencement is only an EFFECT, or development of long continued pre-existing causes ; if a beginning at all, it is the beginning of the end,—the end of repeated constitutional disturbance. During such constitutional disorder, and particularly during the course of severe fevers,—as a long continued remittent, the fevers called small pox, measles, scarlatina, etc., these minute pulmonary glands, the subjects of predisposition, become diseased : that is, the cohesion and vitality of their atoms are so much further reduced, as to favor the process of degeneration, which is accomplished by that method called ulceration. The affected gland is at first almost microscopically minute ; but as the cohesion of its atoms is gradually weakened, it enlarges in size and becomes of a reddish gray color, or it may at once pass into the suppurative process, as an abscess, varying in size from a pea to a walnut ; or it may continue to increase in size without ever becoming an abscess,—but the function of the affected lung is alike impaired. In most cases, both of the above modes of degeneration progress at one and the same time, one gland or cluster of glands suppurating and making the lung cavernous,—another gland or cluster swelling and coalescing, so as to fill up or solidify the section of the lung in which

they exist. In proof of the facts here asserted, we refer the reader to similar changes, as seen in the progress of the development of the scrofulous predisposition, as manifested in the glands of the neck. In health, these glands can neither be seen or felt; but when subjected to the conjoined influences of predisposition, and exciting causes, as poor living, exposure to cold, the exhibition of mercury, etc.—these very glands (so small as to be unseen) enlarge, and form tumors, which present the same red, gray appearance, as was described in the glands of the lungs; these tumors generally are resolved into abscesses, and removed by suppuration.

TREATMENT.—Where predisposition exists, every effort should be made to prevent its development into active disease. Nutritious and substantial diet is of great importance;—pure air, and due exercise should not be disregarded. Night air, crowded rooms, as theatres, etc., should be avoided. The clothing should be warm, and the feet and chest carefully protected,—the habits of life should be regular,—the meals, the hour of rest, and the hour of rising should all be timed, thereby aiding the maintainance of the periodic functional movements. The surface of the body should be sponged daily with cold water, followed by brisk friction, and the mental state kept cheerful, joyous, and hopeful.

The influence of an appropriate prophylaxis is illustrated by the case of two brothers, in both of whom the consumptive predisposition existed. They were, about the same time, both subjected to a slight attack of hemoptysis. The one availed himself of the above means—was careful and *regular* in all his habits, and made daily use of cold baths and friction,—the further progress of the disease

was arrested, he is now living, and in the enjoyment of good health. The other, discouraged, continued his usual habits and employments, and soon sank beneath the disease.

The practice, recommended by many eminent authorities, of sending consumptives to warmer climates, is in most cases infutile and inhuman. Seldom indeed is any favorable change effected; and in most cases death is accelerated by the change, aided by the influences of absence from home, the loss of the kind offices of friends, and the sudden disrapture of all social comforts. Is it any wonder, when these circumstances are borne in mind, that so many thus circumstanced should die amid strangers,—exposed as they are to all those added sources of depression.

To prevent the development of the tubercular predisposition into active disease, and to arrest its progress when commenced, M. Costen, upon the strength of the following experiment, urged iron upon the notice of the profession, and formed high expectations in connection with its administration. He confined dogs and rabbits in dark damp places, feeding some upon ferruginous bread, and others upon a very meagre vegetable diet. The former did well—the latter soon became scrofulous and tuberculous.

Prof. J. K. Mitchell advises “Fowler’s solution,” in two or three drop doses, thrice daily,—having seen it arrest the tuberculous development in cases where several members of the family had died consumptive. The *modus operandi* of the result is easy of solution,—it subdued the low (constitutional) febrile disturbance upon which alone the development of the disease depends.

The general treatment of the incipency of the disease

has been already noticed ; attention to the secretions, nutritious diet, appropriate labor and exercise, and the exhibition of remedial agents designed to improve the general health, and to increase the power of the system.

Amongst the preparations of iron, the phosphate is the most generally available,—but the soluble citrate is a very useful and reliable one.

When complicated with the scrofulous predisposition, an almost constant occurrence, some of the preparations of iodine should always be employed, as the iodide of potassa, or the iodide of iron ; or the following combination, from which we have seen the most favorable results :

R. Iodini, gr. viii.  
Potassæ Iodidi, gr. xxxii.  
Cantharides Tinct., ℥ ii.  
Sarsæ Syr. Comp., ℥ vi. M.

Of the above, a small table spoonful should be given, about an hour after each meal.

In cases where waste of substance has commenced, we have, with very good effect, substituted the following, for the cod liver oil, so generally repulsive to the patient :

R. Ol. Europæ, vel olivari, O i.  
Phosphorus, gr. viii.  
Iodini Tinct., ℥ vi. M.

The commencing dose is a table spoonful, (well shaken) three times daily, which may be gradually increased to two or three table spoonsful.

For the relief of the cough, any of the sedative expectorants already noticed, may be employed : or the following combination, where the pulse is inclined to too great frequency, will be found very useful.

R. Ipecac. Pulv., gr. xii.  
Digitalis Fol. Pulv., gr. xxiv.  
Hyosciami Ext., gr. xxxvi.  
Potassæ Cyanureti, gr. iss. M.

Make the above into pil., xxiv;—of which one may be given as indicated by the severity and frequency of the cough.

Phosphate of lime has recently been brought into some medicinal notoriety, as an agent in the treatment of phthisis pulmonalis. We much prefer the olive oil phosphorized, simply, or in combination with iodine; if lime is administered, it should be given in solution, (as the lime water of the Pharmacop.)

Keep close watch upon the paroxysms and remissions,—alleviate the paroxysmal symptoms, and then administer appropriate intermittents, as quinine, hydrocyanic acid, iron, etc.—naptha, and creosote, the former in 5 to 10 drop doses—the latter in doses of from one to three drops, in mucilage, have been found serviceable, and so has the inhalation of the fumes of tar, or resin. The atmosphere very slightly charged with chlorine, thrice daily, has been of occasional service; and a dry cough will often at once yield to the inhalation of the vapor of water in which tar has been diffused.

In Hemoptysis, a prompt emetic should be administered; and if severe, ligatures should be applied around the extremities, near to their connection with the trunk. A cold application should also be made to the chest, and stimulating poultices to the feet. Keep the patient still. Remission obtained, at once employ the appropriate intermittents, as quinine gr. i, morphine gr. 1-8, every two hours: don't starve the patient; let his diet be nutritious and stimulating.

Severe pains in the chest, may be relieved by the solution of cyanuret of potassa, externally, and the inhalation of the vapor of water upon which a small quantity of

ether is occasionally thrown. Difficult or spasmodic breathing will also generally yield to the inhalation of the vapor of water in which the leaves of belladonna are infused. The dilute mineral acids are serviceable where the cuticular fibre is greatly relaxed, and particularly where there is much tendency to night sweats.

The varying phases of the disorder, as the patient is passing through the last stage, are so numerous,—and the symptomatic remedies which may from time to time be indicated, require so many changes, as to render their notice wholly impossible in the pages of a Compendium. We have given the young practitioner, herein, the general principles of treatment, and called attention to some of the most important symptomatic indications; he has the result of our experience, embracing a practice of many years,—but he must rely much upon his own judgement, the individualism of each patient, and the marked characteristics of the case.

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## SECTION VIII.

### INTERMITTENT FEVER, WITH CIRCULATORY MODIFICATIONS.

There are fashions in physic as in dress; hobbies which, bearing some great name, have for the time an almost boundless popularity. The present medical hobby is without doubt, the stethoscope, and the chest the course upon which it is running its race. By the aid of this wondrous divining rod, the invention of Laennec, it is amusing to witness how clearly certain sage gentlemen assume to see into a millstone, and with what minute precision they pre-

tend to make record of the sounds and signs it is supposed to reveal ;—sounds and signs which, in the greater number of cases, have as much of truth and reality in them, as the roaring of the sea with which the child deludes his fancy, when holding a shell to his ear.

A patient complains of flutter, or some uneasiness in the region of the heart, and the oracular stethoscope is instantly produced. Astonished, and not unfrequently terrified, the breath is drawn convulsively—the heart beats rapidly, —and the indications obtained by Laennec's toy, at such a moment of doubt, and anxiety, and fear, are duly registered, and sagely recognised as infallible.

“ Have we not had too much talk of heart disease since the stethoscope has come so generally into vogue ?” asks the learned Dr. Uwins. Let Dr. James Johnson, in the pages of the *Lancet*, answer the question. “ It is a common error in young practitioners, to consider the heart as organically diseased, when its *functions* only are interfered with ; and *this error* has become *more general*, I am sorry to say, *since the STETHOSCOPE has come into use.*” Nor are *young* practitioners alone liable to such errors ; for, says an able London physician, writing on this subject : “ I have seen two experienced stethoscopists examine a patient with supposed heart disease, and come to the most opposite conclusions,—one declaring the organ to be enlarged, the other assuming, with equal confidence, that it was the reverse !” A merely functional variation of the heart's movements, may produce every apparent symptom of organic change,—hence the fallacy of the stethoscopist's revelations. But suppose that by the aid of this hollow stick, every change in the heart's structure could be accurately hair-split, of what practical value would such



facts be to the practitioner? for no one, not even the most pompous and pedantic of the whole tribe of stethoscopists, will dare to assert that, thereby, organic disease of the heart is rendered any more controllable !

With these introductory observations, we shall proceed to consider,—

### 1st. *Pericarditis, and Endocarditis.*

The symptoms of pericarditis are local, and physical, so say the authorities,—and yet neither of them are conclusive. “The attack is usually ushered in with *chills*, followed by *fever*, sometimes faintness (depression) instead of the chill,”—thus, testify the authorities that the disorder is but a modification of the type of all disease, with a cardiac development.

GENERAL SYMPTOMS.—Peculiar anxiety and distress of countenance, change of manner and expression, pain generally in the region of the heart, increased by full inspiration, or by pressure between the ribs, and upward, against the diaphragm. Pain and stiffness about the left shoulder are not unfrequent, sometimes extending down the arm, to the elbow, and occasionally to the wrist,—a sense of pain and oppresion at the epigastrium,—dyspnœa and palpitation,—frequent, and often irregular pulse; head ache, delirium, great debility, approaching to syncope; towards the close greatly increased anxiety of countenance, with œdema of the face and extremities.

Of the physical signs, only one is important and reliable,—the *friction*, or *to and fro* sound occasioned by the action of the heart, and the attrition of the pericardium.

The disease is considered very fatal by those authors

who so astonishingly continue to advise "bleeding, cupping, leeches, blisters, active purgatives, tartar emetic with nitre, croton oil, etc., and when nervous symptoms arise, conium:" and yet, in the face of all this "regular" treatment, Professors Dunglinson and Wood admit, that when pericarditis depends upon rheumatism, as it most commonly does, all the measures they have advised, fail of affording relief, and subduing the so-called "inflammation," thus leaving the heart to struggle on against the disease, and the superadded debility induced by the heroic measures employed; but they naively add, "should the patient survive these prompt means, there is great danger of structural disease of the organ." What a humiliating confession! Their orthodox treatment is almost always fatal, for the life of the patient is in great risk,—and should he survive, they have neither subdued the bugbear inflammation, or prevented the occurrence of organic disease!

How then should pericarditis be treated? Exactly as we would treat pneumouia or pleurisy, for the only essential difference is that the magnetic force is determined to the pericardium, instead of to the pleura, or the lung. Let then the wet bandage of solution of cyanuret of potassa, be applied, or the dry cups,—procure remission by emetine, to which digitaline should be conjoined to reduce the arterial action: repeat these remedies as indicated; procure sedation by morphine, or prussic acid, or the two in combination, as in rheumatic carditis. Keep the secretions right,—and having obtained remission, perfect and prolong it by quinine, prussic acid, and morphine. If effusion ensues, indicated by great dyspnœa, and dullness—treat as advised in pleuritis.

ENDOCARDITIS is recognised, in addition to the symp-

toms already described, by the tumultuous action of the heart,—small, rapid pulse, cadaveric paleness or lividity of the surface, unnatural opening of the lids, exposing much of the white of the eye, cold sweats, extreme anxiety, with a distressing sense of suffocation.

The most valuable physical sign is the *bellows murmur*, which is readily heard by laying the ear over the cardiac region: it indicates a defect in the valves, most frequently of the aorta.

We need not repeat the treatment; its details have been already illustrated in the preceding chapters. As paroxysms and remissions mark the disease, so must paroxysm and remission closely engage the attention of the practitioner. We have succeeded in relieving and curing many cases of so-called heart disease, by a judicious employment of the means herein suggested, even where the “regular practice,” aided by lancet and stethoscope, had utterly and hopelessly failed;—they failed in treatment, and they failed in prediction also,—for they predicted the death of the several patients.

## 2d. *Structural Changes,—Valvular Disease.*

Chronic disease of the valves of the heart is not of unfrequent occurrence, and those of the left side are most usually thus affected. Structural valvular disease is generally the sequence of the two preceding manifestations of disordered action.

With valvular disease, hypertrophy and dilatation soon follow, and are so intimately associated in their general symptoms, that it is almost impossible—even was it ever so desirable—to discriminate *accurately* between them.

The symptoms detailed under the two last described modifications of cardiac disorder, may be also present in valvular disease,—with the bellows murmur, a rasping sound, or a purring tremor.

If the semi-lunar valves of the aorta are the seat of structural change, then will abnormal sounds be heard during the systole of the ventricle, over the seat of the valves, upon the sternum, opposite the lower margin of the third rib, and thence, upward along the course of the aorta, or its ramifications. If the sound is inaudible up the aorta, but distinctly heard up the pulmonary artery, and to the left of the sternum, then the disease is in the pulmonary valves.

When the mitral valves are affected, the murmur is most distinctly heard near the apex of the heart, slightly to the right of the nipple. The morbid sounds of the tricuspid valves are heard, like those of the mitral, a little above the apex of the heart, but more to the right, and nearer over the sternum.

In reference to the diagnosis, it should be borne in mind that these abnormal sounds may exist in anemic and dyspeptic derangements, and hence their presence alone, is not to be relied upon, without other accompanying symptoms. The non-recognition of this important fact, has led many so-called eminent practitioners,—even when aided by “the infallible stethoscope,”—into serious, and in too many cases, fatal blunders.

In the earlier stages of hypertrophy, the patient only complains of occasional palpitations, dyspnoea, slight precordial pains, stricture, or uneasiness, etc. Running, or climbing produce unusual fatigue, and an increased throbbing of the heart, ordinarily sensible to the hand, and of-

ten visible to the eye, “particularly during the paroxysms of palpitation ;” and even when, in the further progress of structural change, the “palpitation and dyspnœa become habitual,” they are “still liable to remissions and exacerbations.” (*Wood.*)

CAUSES.—Not unfrequently rheumatic fever—a modification of intermittent fever;—the cardiac region being the local point of the most severe disturbance, thereby exposing the heart or its appendages to structural change.

TREATMENT.—The first consideration is the general health of the patient: see that the secretions are right,—if excessive, or defective, administer the appropriate remedies. During the remissions, give prompt intermittents, with such symptomatic remedies as may from time to time be indicated. We annex some forms of combination, for the guidance of the young practitioner. To promote absorption of valvular deposit—

R. Iodini, gr. ii.  
Potassæ Iodidi, gr. xvi.  
Cantharides Tinct., gtt. lxxx.  
Aquæ, ℥ ii. M.

Of the above, a teaspoonful may be given thrice daily, in the periods of remission ; or the following :

R. Iodidi Ferri Syrupi, ℥ i.  
Sarsæ Syr. ℥ iii. M.

A table spoonful every four hours, during remission ; and the iodine ointment may be applied externally.

To relieve the paroxysmal palpitation, the annexed :

R. Valerianæ Tinct. Saturat., ℥ ii,  
Hydrocyanici Acidi, gtt. xxxii. M.

A tea spoonful at intervals of from half an hour, to an hour, as the severity of the paroxysm may indicate ; or

R. Valerianæ Tinct. Saturat., ℥ ii.  
Etheris Sulphurici, ℥ i. M.

The dose, and repetition, as in the preceding formula.

In hypertrophy, where the magnetic state is predominant :

R. Emetin., gr. i.  
Lobeliæ Tincturæ, ℥ i. M.

A tea spoonful, as indicated.

Where there is acidity of the stomach, with palpitation, and a feeble, or anemic state, the following :

R. Potassæ Carbonatis, ℥ i.  
Hydrocyanici Acidi, gtt. viii.  
Aquæ, ℥ iii. M.

A table spoonful every two to four hours as indicated ; and during the remissions :

R. Ferri Citratis, gr. lxviii.  
Hydrocyanici Acidi, gtt xxxii.  
Aquæ, ℥ ii. M.

A tea spoonful three or four times daily ;—if the uterine secretion is redundant, restrain it by the appropriate remedies.

### 3. *Anemia and Chlorosis.*

The phases of disordered action vary greatly as the electrical, or magnetic state may predominate, and be locally determined. Seldom indeed, as in anemia, do we find the electrical state so marked in its development and perpetuation. The name of this phase of disordered condition signifies bloodlessness ; the patient is weak, pale, blanched,—the blood is deficient in quality, if not in quantity,—for chemical analysis has proved that the red glob-

ules are sadly out of their normal porportion, while the serum is greatly in excess.

**GENERAL SYMPTOMS.** Great debility,—skin soft and of a deadly or waxen hue,—lips blanched, and often the tongue also,—digestion greatly impaired,—pulse and respiration a little accelerated, but feeble and oppressed, and both readily increased upon the slightest exertion, or mental emotion; œdema of feet and ankles in the evening, and puffiness of countenance in the morning, frequently are coincident with this impoverished state of the sanguineous fluid. When the red corpuscles, which in health average 125 to 130 parts in 1000, fall below 80, the *bellows* murmur is never absent. (*Andral.*)

The blood of an anemic (?) patient has been submitted to chemical analysis, with the following marked results :

Red corpuscles,	38	Normal state 125 to 130.
Solid constituents,	132	
Water,	878	

**CAUSES.** General loss of blood as from hemorrhage, frequent epistaxis, profuse menstrual flow, repeated miscarriages, and flooding after child-birth. In the unmarried female, a state simulating anemia, is recognised by the phrase, chlorosis, with which it is confounded; but anemia is, in our opinion, always the result of loss of blood, a reduction in its volume, while chlorosis depends upon a change in its quality, or constituent elements. Hence, in the treatment of chlorosis, the preparations of iron are of inestimable value, as the following fact, amongst numerous others, will abundantly prove.

The blood of the patient, the analysis of which is given above, was subjected to a second analysis, after an eight weeks course of chalybeates, with the annexed result :

Red corpuscles,	-	-	-	-	-	98
Solid constituents,	-	-	-	-	-	192
Water,	-	-	-	-	-	807

A comparison of the two analyses is full of instruction, and indicates the appropriate treatment ;—notwithstanding the ridicule with which the so-called hydropathists attempt to write down the employment of those preparations.

But ferruginous preparations do not meet the indications in true anemia, as may be seen from a paper published in the *Boston Medical and Surgical Journal*, wherein is detailed the treatment of twenty-one cases, in the practice of a single physician, seventeen of which terminated fatally. Is not the cause of that fatal result attributable to the fallacies of the schools, and their non-recognition of the point of difference between anemia and chlorosis ?

In anemia, the state of the patient presents several distinctive characteristics, not found in chlorosis ; and especially in the performance of the function of respiration, which closely resembles the breathing of the cholera patient.

If the pneumo-gastric branch of the eighth pair of nerves, is, in the dog, included in a ligature, it soon presents symptoms which bear a marked resemblance to the anemic patient ; and a similar state may at any time be, and often is, produced by the lancet, or other mis-called remedial abstraction of blood.

Hence the anemic state is dependent upon two causes ; (1) the loss of blood, and (2) the partial paralysis of the pneumo-gastric branch of the eighth pair of nerves,—inducing first, a greater or less degree of respiratory inefficiency, and second, preventing the full oxygenation and revivification of the sanguineous fluid.



If these views are correct, and we have tested them in the treatment of several marked cases of anemia, it is at once apparent why the ferruginous preparations, although so serviceable in chlorosis, are of little or any value when exhibited in the anemic state.

Another fact remains to be noticed, in corroboration of the views herein given. In chlorosis, the process of digestion suffers little interference, whilst in anemia, that process is greatly impaired, or almost wholly suspended,—and suspended because the nerves upon which digestion depends are paralysed.

**TREATMENT.**—In chlorosis, the first indication is to restore the general health, by due attention to the secretions, and the exhibition of those symptomatic remedies which the individualism of each patient may demand.

**CONSTITUTIONAL REMEDIES.**—General intermittents, amongst which iron holds the first rank. The mixture of carbonate of iron, see page 150, will be found of great service, given in doses of a table spoonful every four hours; and quinine, in two to four grain doses, thrice daily, may be conjoined therewith. Or the mixture may be prepared by the substitution of phosphate of iron in place of the carbonate. The ammoniuret, and soluble citrate, are also valuable agencies. The sulphate, with the addition of dilute sulphuric acid, will often be found of great utility; two grains, with thirty drops of the dilute acid, thrice daily.

Whilst exhibiting the ferruginous preparations, small doses of irisine, and leptandrine, should be given night and morning, in quantity sufficient to prevent constipation, and to regulate the action of the bowels.

The treatment should be steadily continued from one to

three months, or until the changed character of the case indicates a cessation of the remedies. Under this treatment, the leucorrhœa, which is almost invariably an attendant symptom, will disappear, and the uterine functions are at the same time restored; but throughout the whole treatment, paroxysm and remission must be observed.

**TREATMENT OF ANEMIA.**—The administration of the several combinations of iron will be found valueless in anemia, until the respiratory and digestive functions are greatly relieved and improved. For the first indication, stimulating frictions to the spine, and mild sinapisms to the lower extremities. A hot solution of the cyanuret of potassa (℥ii to O i) should be applied to the chest, and changed as soon as its temperature is much reduced. Prussic acid should be administered internally at intervals of two hours, commencing with a single drop, in a tea spoonful of strong brandy and water, and gradually increased to two, or even three drops. Give also the following: a tea spoonful every three or four hours,

R. Strychnine, gr. ss.  
 Cantharides Tinct., gtt. lxxx.  
 Aquæ, ℥ i. M.

When the irritability of the stomach has been overcome, until which time give only iced water, in very small quantities, let the patient have appropriate and nutritious diet; and if indicated, administer small doses (1-4 gr.) of leptandrine, with quinine (gr. ss. to ii.) every four hours.

As soon as respiration and digestion are improved, the citrate of iron in grain doses, thrice daily, may be conjoined, and the diet cautiously increased; but do not allow the character of the secretions to escape notice. Have the surface of the body washed daily, followed by brisk

friction ; let the chamber be freely ventilated, so that an abundant supply of oxygen may at all times be attainable. When convalescence has become established, give the mixture of carbonate of iron, for which see page 150.

*4th. Hemoptysis,—Spitting of Blood.*

The several forms of hemorrhage which are usually committed to the care of the physician, are those which but rarely involve any perceptible alteration in the anatomy of the part from whence the blood escapes, and are, therefore, less readily controlled than those to which the surgeon can apply his ligatures, compresses, etc.

SYMPTOMS.—The symptoms of hemoptysis, are, expectoration of more or less frothy, florid blood, preceded by cough, dyspnœa, a sense of heat in the chest, and a peculiar saline taste in the mouth. It is preceded by more or less depression, and is marked by a febrile state of the system ; and the paroxysms are repeated usually with great uniformity as regards time.

“ Sometimes the discharge is suspended for a longer or shorter interval, for example, a few hours a day, or more than a day, and then recurs, to cease again, and again recur.” (*Wood.*) Thus the authorities admit its paroxysmal and intermittent nature ; and yet, strange to say, they utter not a word about preventing this paroxysmal recurrence.

The young practitioner should remember that the blood expectorated may come from the nasal fossæ, the larynx, the trachea, etc., and that it may also arise from the suppression of an habitual discharge : hence alarm need not be manifested in every case of spitting of blood.

*Persons Liable.*—Those laboring under phthisis, or a tuberculous predisposition, or organic disease of the heart, and those afflicted with a vicarious hemorrhage, as uterine, or rectal.

**TREATMENT.**—When it is borne in mind that phthisis is by far the most frequent complication of hemoptysis,—that a tuberculous, or scrofulous predisposition constitutes also a predisposition to it, (*Wood*,) it must at once be evident that the depletive practice so generally advised, is, and always must be prejudicial to the patient; for (*Dr. Wood*, being our witness) whatever exhausts the patient, contributes to the progress and the danger of the disease, by favoring the deposition of tuberculous matter. Had we no other reason for discarding blood-letting in the treatment of hemoptysis, *Dr. Wood* has furnished us a sufficient one.

Apply a cold solution of cyanuret of potassa (℥ ii to O i) to the chest, and ligatures around the upper and lower extremities, close to their connection with the trunk, and give an emetic of emetine, or of emetine and lobeline combined. Place the feet and hands in hot sinapised water, and let the patient *eat* small pieces of ice;—and reduce the force of the circulation by digitalis, if indicated. By a prompt employment of these, or similar means, we have not for years failed to arrest hemoptysis, and in every instance without having recourse to the lancet.

Remission attained, at once put the patient under two to four grain doses of quinine, with tannic acid, one grain, every three or four hours, and conjoin therewith prussic acid in doses of two to four drops.

The patient should be kept quiet, and every effort made

to calm his mental excitement,—the diet should be nutritious, and, as well as his drinks, be taken cold.

Hemoptysis is a disease of debility, and most commonly of exudation; hence further depletion, aided by antiphlogistics and starvation, can only, as asserted by Prof. Wood, aggravate its danger by “exhausting the patient, and contributing to its progress.”

We need here only repeat that the secretions should receive due attention, and be regulated by the appropriate remedies.

Vicarious hemorrhage should be met by the exhibition, if marked by debility, of appropriate doses of muriated tincture of iron, alum, tannic acid, elixir of vitriol, or turpentine. To these remedies, quinine, salicine, or piperine should be conjoined.

#### *5th. Hematemesis,—Vomiting of Blood.*

DIAGNOSIS.—A dragging sense of weight, and fullness, with dull, heavy pain at the epigastrium, and right hypochondriac region, and vomiting of greenish, dark, and sometimes coagulated blood.

PERSONS LIABLE.—Dyspeptics and drunkards, females whose catamenia are suppressed, and those of a cancerous or other malignant diathesis.

TREATMENT.—Nitrate of silver, where ulcers of the stomach are suspected. Restore the suppressed uterine secretion. Let the diet be vegetable and nutritious. Ice chewed, or broken in small pieces, so that it may dissolve *within* the stomach. Mitchell recommends oil of turpentine, twenty-five drops, every four or six hours; if it sickens the stomach, add prussic acid, two to four drops, to each

dose of the turpentine. Tincture muriate of iron, alum, tannic acid, or elixir of vitriol, in a cold bitter infusion, as tansey, chamomile, gentian, etc.

Regulate the secretions by appropriate remedies; employ the tepid or cold sponge bath daily, with brisk friction after its use, and avoid undue exertion. Where there is marked constipation, give irisine and leptandrine in alterative doses; and where there is a tendency to diarrhœa, laudanum, opium, or Dover's powder may be conjoined with tannic acid. Alcoholic stimulants should be avoided, and the dyspeptic symptoms overcome by the indicated remedies, and appropriate diet.

#### *6th. Hematuria,—Bloody Urine.*

Though sometimes without sensible premonitory symptoms, the attack is generally preceded by a frequent desire to micturate, with ardor urinæ, a sense of bearing down, and pain, in a greater or less degree, at the neck of the bladder.

The bladder is generally the source of hematuria, when before, or accompanying it, there is uneasiness over the pubis; and when it has been preceded by pain, heaviness, or uneasiness in the loins,—blows, or a fall upon the back, or the strain of immoderate lifting, the kidneys are its source.

**TREATMENT.**—The remedial measures employed, must be governed greatly by the cause of the occurrence. When the result of irritation, blows, falls, cold, etc., dry cups may be applied over the renal region, followed by the cold solution of cyanuret of potassa; hip-baths and frictions are also useful. The internal remedies are spirits

of turpentine, copaiva, nitre, etc., but the canadian balsam will be found in most cases, the best and most agreeable remedy :—they should be administered in cold mucilages, which should also be drank freely.

The leaves of the peach tree, and the buchu leaves are also very serviceable,—and in severe cases the tincture of muriate of iron may be employed. If the attack is attended with much pain, or great nervous irritability, give morphine gr. 1-3, with prussic acid, two drops, every four hours.

When degeneration of the kidneys is the source of hematuria, all that the physician can accomplish, is relief for the patient—as the case is incurable. Sedation offers the only relief,—and morphine, prussic acid, and chloroform, are our most available agents.

#### *7th. Menorrhagia,—Uterine Hemorrhage.*

By this term is understood that phase of intermittent disorder, determined to the uterus, in which the electrical state largely predominates. “Simultaneously with the menses, or which, originating from mere functional derangement of the organ, (the flow,) may be considered as somewhat analogous to the menstrual in its character.” (*Wood.*)

The premonitory symptoms are, usually, a sense of weight, fullness, or heat in the region of the uterus, pain in the loins, more frequent micturation, and more or less “bearing down pains.”

After the first gush, the excitement and turgescence, with the more prominent symptoms, are greatly relieved; after a remission more or less complete, the hemorrhage

not unfrequently returns, again and again, until the strength of the patient is exhausted. (*Wood.*) But why allow these paroxysms to be repeated “again and again,” until, by their repetition, the poor patient is exhausted, and probably enfeebled for life?

**TREATMENT.**—Copious injections of iced water, which may, in severe cases, be slightly acidulated with alum, or made more astringent with oak bark. The cold hip bath, or a cold solution of the cyanuret of potassa to the loins and pubis.

Give the patient the following combination every two hours, until the flow has been wholly overcome :

R. Quiniæ Sulphatis, gr. xxiv.  
Morphiæ Sulphatis, gr. iii.  
Tannici Acidi, gr. xxiv—xxxvi. M.

Divide into twelve parts.

As uterine hemorrhage is always preceded by an enfeebled state of the general health, and profuse leucorrhœa, the employment of the ferruginous preparations is indicated;—and appropriate uterine support will be found of much advantage. Attend to the general secretions;—let the diet be non-stimulating and nutritious, and if the patient be married, advise great caution in the connubial act—a free indulgence therein will greatly retard the cure of the case.



## SECTION IX.

## INTERMITTENT FEVER,—WITH SECRETORY MODIFICATIONS.

*Class 1st., Dropsy.*

Under this subdivision, we have to consider the varied modifications of disease know by the general phrase of dropsy. But what is dropsy? It is only a development, or result of a series of prior constitutional paroxysms of disordered action, whereby the absorbent and secretory organs are impaired, or largely increased in their powers, and in some cases their functions wholly inverted.

Dropsy is an intermittent fever, modified by various causes, with the sweat determined inwards, instead of to the external surface. It is marked throughout its course by chills and fever, of more or less intensity; but the period of the restoration of equilibrium is unaccompanied by the usual sweat, and in most cases by the non-restoration of the general secretions. Its remissions are well marked, and its exacerbations may be quotidian, tertian, or quartan. These remissions, or intermissions, are further marked by a diminution of the effused fluid, and a proportionate reduction of the abnormal size of the patient.

*1st. Anasarca.*—The word is derived from *ανα*, through, and *σαρξ*, flesh; a collection of water diffused thro' the cellular membrane of the body.

Cellular dropsy usually commences in the lower extremities; the feet and ancles ache, and gradually enlarge, but more particularly during the evening of each day;

these symptoms disappear by morning, to recur again and again, with a continually increasing weakness, and enlargement of size.

The swelling is soft and inelastic, retaining for some time the indentation made by pressure. Though dropsy may, from rapid effusion, attack the whole system at once, it most commonly gradually ascends from the feet and ancles, to the thighs and body, encroaching upon the abdominal and thoracic viscera, impeding circulation, and exciting cough by its mere pressure, or by involving the cellular or serous membrane of the lungs.

The skin is at first paler than usual, tense and shining, exhibiting in a more advanced stage, a livid hue. Sometimes an erisipelatous inflammation (so-called) attacks the integuments, forming sores; or the skin gives way, when the exhaustion and irritation are more than the feeble system of the patient can support, and he sooner or later sinks.

**CAUSES.**—Increased activity of the secretions, with the absorbents normal, or the absorbents may be in a state of inefficient action; the exhalents may remain normal, or the orifices or pores of the secretory vessels may become so relaxed, by pre-existing debility, that the more liquid portions of the blood ooze through their patulous mouths; or serous effusion may depend upon an altered condition of the blood, as in the chlorotic or anemic state. *Anasarca* may also be induced by exposure to cold and dampness, particularly if aided by poor and innutritious diet; by the excessive or long continued use of alcoholic drinks; or it may supervene upon hemorrhages, scarlatina, fevers, fluxes, the administration of mercury, etc.

**TREATMENT.**—First, endeavor to appreciate the cause,

the main indication, and next, let the treatment be directed to its removal. Second, remove the fluid already collected in the cellular membrane ; and third, correct the defective action of the system, and thus prevent continued effusion.

Should the precise pathological condition not be apparent, or should it be irremediable, then the efforts should be directed to the absorption and discharge of the effused fluid.

When the pulse is vigorous and full, and all the symptoms of active febrile excitement are present, blood letting is strongly recommended by the authorities ; and yet these same authorities declare they have " known frequent losses of blood to have been the cause of dropsy, by rendering the patient anemic."

If the febrile (magnetic) state is marked, it may readily be changed by salines, the compound powder of jalap, or elaterium, in the dose of one eighth of a grain, repeated every two to four hours,—the use of the tepid bath, diuretics, etc. The vapor bath is also of essential service.

Where there is relaxation and debility, with an impoverished condition of the blood, (the electrical state predominating) the indications are to improve its condition, and to give contraction and firmness to the tissues. For this purpose, the salts of iron, and quinine, with baths and brisk frictions, are the most efficient. Whilst our efforts are thus directed, we should, at the same time, endeavor to remove the effused fluid, by promoting the action of the exhalents,—the kidneys and the skin are the most easily and favorably influenced by remedies, and hence to their increased action we should direct due attention.

The action of the kidneys may be favorably influenced

by the exhibition of the bitartrate of potassa, or the acetate of potassa. The latter may at any time be extemporaneously prepared, by saturing the carbonate of potassa with dilute acetic acid: of the acetate, from half an ounce, to two ounces, may be given daily. Buchu leaves, wild carrot, turpentine, or copaiva, may be often advantageously conjoined, and the tincture of cantharides is often of service. The infusion of digitalis (℥ i. to ℥ viii.) may also be given in table spoonful doses, as frequently as the patient can bear its action.

We subjoin a few formulas for the convenience of the young practitioner:

R. Magnes. Sulph., ℥ i.  
Potassæ Nitratis, ℥ i.  
Limonis Suc., ℥ i.  
Aquæ, ℥ iii. M.

The above may be given in the dose of a table spoonful, every hour or two, until remission and free discharges are induced. A full dose of morphine may then be given, which is usually in the course of three to four hours, followed by a large urinal flow.

If the skin is cold, the surface pallid, and the pulse sluggish, piperine in full doses should be administered;—or hollands' gin, and water, taken hot, is admissible.

Tincture cantharides, ten drops, and prussic acid two to four drops, given in a little gin and water, every four hours, will often be found of much service. If the absorbents are inactive, the iodide of potassa, in two to four grains doses, may be added to the last named combination; and occasionally the wine of colchicum, in tea spoonful doses, may take the place of the cantharides therein;—

but we have found the most marked benefit from the employment of the cantharides and prussic acid.

Hollands gin, saturated with equal proportions of indian hemp, and elder bark, and given in the dose of a table spoonful, in a little water every two to four hours, is sometimes very useful, especially in cases where there is much general irritability.

Warm poultices to the loins, and indeed applied as generally as possible to the surface, where there is coldness or chill, are of much advantage; and where cold chills are frequent along the spine, a galbanum plaster should be applied to its whole length.

Blisters are always inadmissible, from the great risk of subsequent and dangerous ulceration, but dry friction is always indicated, and is of the greatest service.

In the treatment of anasarca, the individualism of each patient will demand the closest observation. Let it be remembered that the restoration of the general health is the first, and all-important indication, that dropsy is not a disease,—not the beginning of a diseased condition, but the beginning of the end of a series of paroxysms of low chronic fever. Hence the philosophy of the constitutional treatment of the case, whilst the symptomatic treatment, although of much value, is only of secondary importance.

Anasarca sometimes supervenes upon the subsidence of scarlatina, particularly if the child be prematurely exposed to cold. When thus originating, its treatment must be promptly constitutional. It often presents upon hemorrhages, fevers, fluxes, etc., particularly where the patient has been exhausted and depressed by the lancet, salivation, and starvation: indeed, the lan-

cet and the calomel bottle are amongst the most prolific sources of incidental dropsy.

2d. HYDRO-THORAX.—In its largest signification, hydrothorax means any accumulation of fluid within the chest, or thoracic cavity. The word is derived from *υδως*, water, and *θωραξ*, chest,—hence we have pleural dropsy, water in the cavity of the pleura,—and hydro-pericardium, dropsy in the pericardium, or of the heart. (Pleural, and cardiac dropsy.)

The accumulation of serous fluid within the pleura, arises from previous inflammation of the pleura, or from disease of the heart, or great blood vessels, unless it succeeds upon an accompanying anasarca.

In the so-called inflammation of the pleura, it will be remembered that the action of the secretories may be morbidly increased, or the functions of the absorbents in like manner decreased.

When the quantity of effused fluid is sufficient to interfere with the functional movements of the respiratory organs, we find greater or less difficulty of breathing, increased by exercise, running, or ascending rising ground. As the effusion increases, the patient lays on the affected side, with his head and shoulders elevated; but if effusion exists in both pleura, then the sitting posture is alone tolerable; a position which is maintained, in advanced cases, both day and night. The pulmonary circulation is now much impeded by the pressure of the effused fluid, giving to the lips and face a livid or bluish tinge.

The physical signs are a prominence of the chest over the localisation of the effusion, a separation, or widening of the ribs, and a bulging out of the intercostal spaces; dullness upon percussion, which is always in proportion to the

amount of effusion, and the respiratory murmur may be quite feeble, or wholly lost.

The prognosis is usually favorable, unless the effusion is the sequence of some organic or structural disease, itself incurable.

HYDROPS pericardii is a frequent complication with dropsy of the pleura, and general dropsy,—and it is hence diagnosticated with some difficulty. Its most common and prominent symptoms are a small, feeble, irregular pulse,—dyspnœa,—inability to retain the horizontal position,—a livid hue of the face, and the lips blued,—prominence of the cardiac region,—œdema of face and extremities, and dullness over a greater space than in health; where these symptoms are found, this local development of disease may be safely diagnosticated. It usually supervenes upon chronic pericarditis, or on some organic disease of the heart, lungs, etc.

TREATMENT.—The general principles of treatment have already been given under anasarca, hence they need not be here repeated. If the magnetic state characterised by warm or hot skin, and full pulse, predominates, salines are indicated as remittents: or the following combination;—of which a fluid drachm may be given at short intervals until remission, and copious evacuations are induced.

R. Elaterii Ext., gr. i.  
 Etheris Nitrosi Spt., ℥ ii.  
 Scillæ Tinct.,  
 Colchici Vini, a. a. ℥ ss.  
 Sennæ Syrupi., ℥ i. M.

To be given in diuretic infusions, as of buchu digitalis, wild carrot, etc.

Quinine, and sulphate, carbonate, or citrate of iron, with prussic acid, should be exhibited after remission, and

sometimes Fowler's solution, with prussic acid is of much advantage. The iodide of iron is also useful, to give tone to the absorbents.

The treatment of *hydrops pericardii* differs little from that already detailed. In addition to constitutional treatment, symptomatic remedies, as diuretics and hydragogue cathartics must be exhibited ; and for the removal of the effused fluid, a single cathartic must not be relied upon : the hydragogue should be repeated twice or thrice a week, as the strength of the patient, and the character of the case indicates. Upon the cessation of the cathartic action, and when the stomach is quiet, a table spoonful of the following infusion should be administered every two hours ;—should it produce nausea, or giddiness, the dose must be reduced.

R. Digitalis Fol. Pulv., ʒ ss.  
Scillæ Pulv., ʒ i.  
Aquæ Bullientis, ʒ viii.

Strong infusions of spearmint, parsley, dandelion root, winter-green, etc., are all useful as diuretic beverages.

Externally, the ointments of iodine, or iodide of potassium, should be freely rubbed into the chest, over the seat of the effusion.

The treatment should be continued for some time after the more immediate symptoms have disappeared, as there is great liability of a return of the disease, when the remedial means are laid aside at too early a period.

REGIMEN.—The diet should be nutritious, and easy of digestion, and the beverage chosen with special reference to its diuretic properties. Pepper sauce, horse-raddish, mustard, etc., may be used freely, as they are possessed of true medicinal properties in dropsy,—a disease where-



in the loss of tonicity of the system is very apparent ; but they should not be taken when febrile symptoms are manifested.

We remember the cure of a case of dropsy, where the effusion was extreme, by the use of the following simple compound. Horse-raddish and white mustard, each four ounces, bruised in a mortar, and boiled for twenty minutes, in a quart of milk. The decoction to be separated by pressure,—and the whole quantity, taken at intervals, daily. The case had been under regular treatment for months, but without any change for the better,—in a little over five weeks, under the use of the above simple combination, aided by an occasional purgative, the effusion had wholly disappeared.

Carriage exercise should be taken whenever practicable ; and the patient should walk daily as much as his strength will permit, but not to the extent of fatigue.

3d. ASCITIS.—By this term we understand a serous effusion within the folds of the peritoneum, which, in common with general dropsy, is rather the evidence of pathological condition, than a disease per se ; hence its course is mainly dependent upon the visceral disorder, of which it is only a local development.

GENERAL SYMPTOMS.—Fullness above the pelvis, and a progressive enlargement of the abdomen, first attract the attention of the patient. This enlargement is usually most prominent in the hypogastric region, when standing, but disappears to a large extent upon the patient assuming the horizontal position, at which time the greatest fullness is upon the sides, which frequently appear considerably bulged out. The tumefaction at length becomes uniform ; the abdominal parieties are greatly stretched,

thin, and almost transparent, with very observable tortuous veins. Whilst this enlargement is progressing abdominally, at length impeding respiration, by interfering with the mechanical function of the diaphragm, the chest and upper extremities are rapidly emaciated.

We need not here repeat the causes of ascitis, they are most commonly similar in their character to those which have been enumerated in the other dropsical effusions already noticed.

Probably there is no disordered state that has been more frequently mistaken, or in which more *eminent* blunders have been made, than the one now under consideration. Ascitis has been confounded with pregnancy, and Dr. Parr says "more than once has the trocar been thrust into a pregnant uterus." Even the great Sir Astley Cooper, appointed the hour for the performance of the operation of tapping, but a *natural labor* reduced the dropsy, and saved the lady from his distinguished interference. It has also been confounded with ovarian tumor, tympanitis, emphysemetia, pneumatosis, distended bladder, etc. When the symptoms we have above given, are borne in mind, we really cannot see the causes of obscurity which should have occasioned the blundering diagnoses to which reference has been made.

TREATMENT.—Ascitis depends upon some pathological condition, of which it is merely the symptom, or effect; hence its cause should be closely searched out, and the treatment directed to its removal. This accomplished, the effect of the cause will soon disappear.

Calomel and digitalis each one grain, squills, one to two grains, is the stereotyped prescription of the schools.

Cathartics—salines, etc.—whose action is hydragogue;

and diuretics should be exhibited to aid in the removal of the effused serum, and to promote absorption. The tincture of digitalis is serviceable rubbed over the abdomen, (*Mitchell.*) as well as warm, moist poultices. Attention should be had to the general health of the patient: the secretions should receive due attention, and the functions of the skin should be secured by baths, brisk frictions, diaphoretics, etc. If the patient is gouty, which is not uncommonly the case with "*bon vivants*," combine colchicum,—if syphilitic, the proto iodide of mercury, iodide of potassa, and irisine,—if amenorrhœaic, aloetic purgatives, with other appropriate means.

If the effusion followed the drying up of old ulcers, or the sudden disappearance of hemorrhoids, reproduce them by nux vomica, or the application of some irritant ointment to the surface of the old sore. If the liver is tumefied, make friction with iodine, or the iodide of potassa ointment, twice daily.

Should the effusion be the consequence of any marked lesion of the heart, liver, kidneys, etc., all our efforts can only afford the patient temporary relief, and tapping may become imperatively demanded. Dunglison cites a case tapped eight hundred and sixty-six times,—the patient ultimately recovered, by compression of the abdomen. The operation was repeated, in another case, ninety-six times, and 275½ gallons of water removed.

For general treatment, refer to anasarca, and hydrothorax.

### *Class 2d. Diseases of the Skin.*

Cutaneous diseases may be naturally subdivided into—  
1st. Those that are *contagious*, and necessarily local.

2d. Those that are *non-contagious*, and in which the whole system is slightly implicated.

Of the former may be reckoned, at least, *porrigo scutulata*, or ring-worm of the scalp : *P. favosa*, or *tinea capitis*, scald head, and *scabies*, or the itch.

Of the latter, we may enumerate erythema, intertrigo, roseola, and urticaria, in their varieties, as exanthems, or *rashes* ; strophulous, lichen, and prurigo, and their several forms which are *papular* ; herpes, and eczema, and their modifications, *vesicular* ; ecthyma, impetigo, acne, and the non-contagious forms of porrigo, which are *pustular* ; psoriasis, and pityriasis, which are *squamous* ; and naevus, chloasma, pityriasis versicolor, which are *macular*.

The non-contagious cutaneous diseases are, as a class, developed on subjects in whom the electrical state is predominant, and generally demand the exhibition of magnetic or intermittent remedies for their successful treatment.

We are aware, that in the above classification, we have widely departed from the nosologies of Bateman and Willan, but we are of opinion that ours is the most simple, and the most philosophical, and will be found the most practically advantageous to the physician, who may be called upon to prescribe for cutaneous diseases, in the light of the new school doctrines.

The hair splitting nosologies of the old schools are without any practical advantage to commend them to the student of medicine, whom, in common with the young practitioner, they only serve to bewilder : they are in most cases “ distinctions without any real difference.”

*1st. Contagious, and Local Cutaneous Diseases.*

1. PORRIGO SCUTULATA, or ring worm of the scalp is too well known to require lengthened description. It usually occurs in regular, circular patches, with well defined margins; and often feels soft and doughy under the finger. It is contagious, rapidly spreading through a school or neighborhood.

TREATMENT.—Remove the diseased stubs of hair, and stimulate the parts to healthy secretion, by the cold douche. Attend to the secretions. Apply the ointment of sulphate of iron ( $\mathfrak{Z}$  i to  $\mathfrak{Z}$  i) to the affected parts, or the hair may be cut close, and compresses of cold water applied through the day. Ointment of three, composed of equal parts of the tar, sulphur and red precipitate ointments, and Fowler's solution in obstinate cases. Coley apples, leaves of ivy at bed-time; but the best application is the nitrate of silver ointment,  $\mathfrak{Z}$  ii to  $\mathfrak{Z}$  i.

2. P. FAVOSA, TINEA CAPITIS, or scald head. Characterised by large, soft, yellow pustules, which soon discharge their contents in such profusion, as to mat the hair, which, drying, forms a hard crust. The corvical glands are frequently enlarged, with chronic ulcers behind the ears, etc. The disease is strongly contagious.

TREATMENT.—Laxatives, and occasionally an emetic, are of service in the earlier stages of the disease, with attention to the general health conditions. The incrustations should be removed by soft, warm poultices, and recourse then had to appropriate applications, amongst the best of which is the tar plaster, or the nitrate of silver ointment. Small doses of iodide of potassa may be exhibited during the treatment, which, with due attention to the

secretions, will soon rectify the disordered state of the scalp.

**3. SCABIES**—Itch. An eruption of distinct vesicles, in form conical, filled with a transparent, and somewhat viscid fluid, accompanied by pruritus;—generally appears on the backs of the fingers, the clefts between them, the bends of the arms, axilles, groins, around the body, etc.

**TREATMENT.**—A wash holding chlorine in solution, is one of the best remedies; one ounce of chloride of lime to a pint of water, will afford a lotion of suitable strength. The sulphur ointment is an old and well-known remedy. The creosote unguent, (creosote ℥ i, lard ℥ ii,) and one containing sulphuric acid, (sulph. ac. ℥ i, lard ℥ iiss.) have each proved effective, and so has a strong solution of muriate of ammonia.

## 2. NON-CONTAGIOUS CUTANEOUS DISEASES.

### 1st. *Exanthemata, or Rashes.*

**1st. ERYTHEMA.**—Closely connected with erysipelas is *erythema*, with which it is often confounded. It is met with in the following varieties:—*frigax*, *papulatum* et *tuberculatum*, and *nodosum*.

Erythema manifests itself by distinct, circumscribed patches, of a bright or dusky red, painful when touched, and set in parts which are obviously tumefied.

**TREATMENT.**—Dr. Watson has confounded this disease with erysipelas, which he says it much resembles. He treated his housemaid, suffering under its invasion, by anti-phlogistics without success, and then gave her, “he knew not why,” quinine, which speedily cured her.

The rational treatment is first an appropriate remittent, then suitable intermittents. An emetic if the stomach is disordered,—a laxative or enema if there is constipation. Then follows quinine, chlorate of potassa, or intermittent combinations, with sedatives if indicated.

*E. PAPULATUM ET TUBURCULATUM*, generally occurs in children during the period of dentition, and is attended with more or less derangement of the stomach and bowels. The disease is manifested either in isolated points of a round or oval form,—of a very vivid color,—or a number of them may be associated together by their margins, forming irregular tuburculated patches of the size of half a dime. As one crop vanishes, another appears; and thus, *remittently*, the disease is continued, often for several weeks, unless arrested by emetics and quinine, or other chrono-thermal remedies,

*E. nodosum* first manifests itself along the *tibial* line by a sense of heat, and more or less positive pain, after which the parts become tense, and slightly suffused with a blush, which is soon concentrated upon certain points, oval in form, and becoming in color a livid, or dusky red. In four to five days they pass off, like so many bruises, in yellowish stains,

The toes and fingers are sometimes similarly attacked—the affected parts are painful and have much the appearance of chilblains.

The treatment must be constitutional; and where those affected are of a lax and weakly habit, the ferruginous preparations should be combined with other intermittents.

*E. intertrigo*, cum vel sine eczematibus.—Intertrigo, is mainly confined to those having a fine and delicate cuticle, and is the *chafing* of parts in contact with each other.

When the irritation is great, and there exists a predisposition to cutaneous development, distinct vesicles will be seen upon the moist and chafed surfaces, and the disorder soon becomes *eczematous*.

TREATMENT.—If slight, attention to cleanliness, local cold bathing, and absorbent powders, as calamine, or calamine and roasted wheat flour, in equal proportions. If more severe, lotion of sulphate zinc, (gr. ii to ℥ i) or nitrate of silver, (gr. i to ℥ i) conjoined with quinine and aromatic sulphuric acid, internally.

Glycerine, applied to contiguous surfaces, will greatly prevent the tendency to chafing of the parts.

*Roseola*.—An acute affection, characterised by rose-red spots or patches, of a variety of forms, slightly, if at all elevated;—its access is preceded and accompanied by more or less general constitutional disturbance.

*R. æstiva*, occurs in summer only, and not unfrequently attacks adults.

*R. autumnalis*, occurs later in the season, and principally attacks children.

*R. infantilis*, has many features in common with measles; it attacks children during dentition,—is evanescent in its character,—comes and goes, fitfully, for several days in succession.

TREATMENT.—Remove all local causes of irritation,—scarrify the gums, and evacuate from the alimentary canal all indigestible substances. The diet should be simple,—employ tepid or cold sponging;—exhibit quinine, in solution with a few drops of aromatic sulphuric acid. Huxham's tincture is useful, especially if slightly acidulated.

*Urticaria vulgaris*, nettle rash,—is a diffused redness



of the skin, attended with heat and swelling, and a characteristic pruritus, or burning, like that which follows the sting of nettles.

The *premonitory symptoms* are constitutional ;—rigors, restlessness, languor, anorexia ; soon the skin, in districts, becomes hot with itching and burning, and the appearance of a number of pale waxen-colored *wheals*, elevated above the general surface, and circumscribed by a bright crimson margin. These seldom continue more than a *few hours* at a time, but may recur on several *successive* days, at the *same* hour,—and the disease may thus continue, in a chronic form, to torment the patient for weeks, months, or years,—particularly when not treated as a remittent disorder.

TREATMENT.—An emetic is of service, whether the disorder be manifested idiopathically, or arises from indigestion. It should be followed by bland diluents, and gentle aperients,—and tepid or cold bathing should not be neglected. During the intermittent period, full doses of quinine, with prussic acid, should be exhibited, which will almost always promptly avert the disease. In chronic cases, Fowler's solution is often the most serviceable remedy.

## 2d. *Papulæ*,—or *Pimples*.

*Strophulus-intertinctus*, is the most common form of infantile eruption ; it consists of an enlargement, elevation, and induration of the papillæ of the skin.—It is often called “tooth rash ;” but it has no possible connection with dentition, for it often appears a few days after birth. As its name imports, it is intimately connected with irritation and derangement of the *prima via*. It appears in

patches of a vivid, red color, and is most commonly seen on the cheeks, forearms, back of the hands, etc.

*S. confertus* occurs during dentition, from the fifth to the ninth month, and often continues to the second or third year.

TREATMENT.—Attention to the health of the mother, and her secretions, are of the first importance. Her diet should be non-stimulating and nutritious. We are opposed to the administration of medicines to children, during infantile life ; if indicated, they should be exhibited thro' the aliment obtained from the mother.

The child may be bathed daily in warm or tepid water, and the bath may be sulphuretted, or alkalised. A dilute solution of cyanuret of potassa will allay the itching, and cold sponging will often prevent its recurrence.

In children more advanced, as from eighteen months, to three years of age, small doses of quinine, or of the iodide of potassa, will often be found of advantage ; and in chronic cases, Fowler's solution, in doses from half a drop, to one drop, may be indicated, twice or thrice daily. Magnesia, soda, or chlorate of potassa, as ant-acids, conjoined with minute doses of leptandrine, a twentieth to a tenth of a grain, if the bowels are inactive.

*Lichen*.—A papular disease, usually occurring in the spring and fall, and often an annual visitor. It is developed in extensive patches or clusters of minute points, which are solid elevations of the skin, and of varying shades of redness. Its duration is from ten days to two or three weeks.

*Lichen pilaris*, occurs at the back of the neck, at the roots of the hair.

*Lichen tropicus*, or prickly heat, occurs in hot weather,

and is characterised by much tingling, increased by the warmth of the bed and exercise.

*Lichen urticatus* is most frequently found upon the face, neck, hands, etc., resembling the bites of bugs and venomous insects.

*Lichen chronicus*, is generally found on the back of the neck, extending down to the shoulders in one continuous and dingy patch, which sometimes covers the front of the neck.

TREATMENT.—Cooling regimen—the warm, bran, alkaline, or sulphur bath. Internally, some preparation of arsenic will often be demanded: or mineral acids with diluents, as nitric acid one fluid drachm, decoction of barley one pint and a half, syrup two ounces, or, sugar sufficient: the whole of which may be taken daily.

The chronic forms are often exceedingly obdurate, but they will generally yield to the following treatment:—Tepid baths, or spongings with sulphuret of potassa—mild and stimulating ointments—ointment of three (sulphur, tar, and red precip. oint. equal parts.) Internally, quinine, or Fowler's solution in doses of four to six drops for an adult, twice daily, exhibited in two to four ounces of a decoction of bitter sweet.

*Prurigo mitis*.—Patients often complain of an itching over their shoulders, the upper part of the breast, lumbar region, and the external aspect of the extremities. Upon examination we find numerous flat papillæ, soft to the touch, and of the color of the integuments. Pruritus has its remissions and exacerbations, being much increased at night, and particularly after a full meal. Sometimes patients feel as though they were the prey of a myriad of

ants, and not unfrequently tear themselves, almost with the frenzy of despair.

Prurigo is sometimes confined to certain localities, and occasionally its localisations are most unfortunately chosen.

The causes of prurigo are unknown, other than the *fitful* disturbances of the system, and their development upon the cuticle. It may be diagnosticated from all other cutaneous affections, by the little elevated skin-colored papillæ.

TREATMENT.—The sulphur and vapor bath is [the most efficient remedy; where that is not attainable, a warm bath containing sulphur may be substituted. We have in some very severe cases, known the sulphur vapor bath, repeated daily for a fortnight, effect a permanent cure, without the employment of any superadded means. The paroxysms of itching may be usually subdued by the application of cold water, the cold solution of the cyanuret of potassa, or a diluted solution of chlorinated soda. An adult may take one to three drop doses of Fowler's solution, every four hours during the remissions, or the iodide of potassa, or Donovan's solution may be exhibited.

### 3d. *Vesiculæ, or Vesicles.*

*Herpes,—Tetter.*—Herpetic eruptions differ in their form, and are nosologically subdivided into zoster, circinnatus, and iris.

*Herpes zoster*, is a succession of clusters of vesicles, appearing in a straight line, much like beads on a string.

*Herpes circinnatus* presents in an annular form, under two different aspects: (1.) Vesicles very minute, with rings of small diameter: (2.) Vesicles very large, like blebs, and rings one or two inches in diameter.

*Herpes iris* is very rare, appearing singly on the fingers, etc., and are of large size. As one desquamates and disappears, it is promptly followed by another.

TREATMENT.—Neither “blood-letting,” nor “leeches around the patches” are required. Warm fomentations, and solution of nitrate of silver, externally;—rhubarb and soda at bed time, with quinine and aromatic sulphuric acid; infusion of gentian and cinchona, or quinine with prussic acid, internally. The tincture of iodine, externally, is often of advantage. When of long standing, Fowler’s solution, and alterative doses of irisine and scutelline may be demanded; or irisine and leptandrine, conjoined with full doses of iodide of potassa. Sometimes a solution of the acetate of copper, or nitrate of silver in solution, or ointment, will be the most efficacious remedies.

*Eczema Capillatii*.—After a sense of heat, redness, and puffiness of a portion of the scalp, a crop of minute and closely set vesicles arise, filled with a transparent fluid. The vesicles discharge their contents in from twelve to twenty-four hours, a part of which drying, forms a crust of a pale straw color, which gradually increases in size and thickness, and becomes ultimately of a yellowish brown color. Blisters sometimes give rise to this eruption; and it is often met with in a chronic and furfuraceous state, both in adults and children.

TREATMENT.—In infants, tepid bathing only, with due attention to cleanliness. Rhubarb and soda at bed time; mild intermittents, as quinine and elixir of vitriol during the day. When declining, sulphate of zinc, two to four grains to the ounce of water may be applied, or dock root ointment.

When *chronic*, externally, citrine, or white precipitate

ointment, or ointment of three; lotions of sulphuret of potassa and carbonate of potassa, each ℥ ii, in lime water, O i. Internally, Fowler's, or Donovan's solution.

#### 4th. *Pustulæ*, or *Pustules*.

*Ecthyma Vulgari. (Infantilis.)*—An eruption of pustules, singly scattered over the face, neck, shoulders, legs, etc., and characterised by their hardness, and the inflammation which surrounds them.

*Chronic* ecthyma is symptomatic of depraved health, the sequela of some exhausting disease. The pustules greatly resemble those caused by the friction of castor oil, or of tartar emetic ointment.

**TREATMENT.**—Improve the general health, without any special regard to the eruption. Remove all sources of irritation from the alimentary canal, then exhibit gentle intermittents, as quinine, iron, and prussic acid, in small doses, alternating with dilute mineral acids. Externally, warm salt water baths at bed time, or a warm solution of cyanuret of potassa.

*Impetigo* is probably the most common of all the pustular diseases of the scalp, and is most generally found in early life. It is seen under three forms,—*I. sparsa*, or in single insulated pustules; *I. figurata*, or circular clusters of pustules; and *I. annulata*, or pustular rings.

Heat, itching and redness of surface, which is sometimes tumefied, precede the eruption of the pustules, the cuticle of which soon gives way, pouring out an abundance of viscid serous matter, which drenches and mats the hair, and when dried and detached, it looks like dirty pieces of plaster entangled in the hair. The surface of the scalp is left glistening, red, and tense, with a tendency to great cuticular desquamation.

**TREATMENT.**—Tepid baths, extreme cleanliness, attention to the secretions. Internally,—quinine, iron, and in extreme or chronic cases, Fowler's solution. Externally,—solution of nitrate of silver, to arouse the scalp to more healthy action, or the ointment of nitrate of mercury. The two following formulas will be found generally available.

R. Cocculi, Indic., Subtil. Pulv.,  $\mathfrak{z}$  ii.  
Unguent. Simplicis,  $\mathfrak{z}$  i. M.

Apply every night, after the incrustations have been removed by tepid spongings, or by poultices of bread and milk.

R. Hydrarg. Precip. Alb., gr. xl.  
Hydrarg. Bi chlór., gr. x.  
Unguent. Simp.,  $\mathfrak{z}$  i. M.

A small portion to be applied night and morning, to the cleansed surfaces, and alterative doses of podophilline and leptandrine, may be occasionally administered.

*Porrigo*.—*Porrigo scutulata* has been already noticed under the first subdivision of cutaneous diseases.

*Porrigo larvalis*, (*crusta lactea*) occurs on the foreheads and cheeks of infants and children, appearing in numerous whitish pustules, upon a red surface:—these soon evacuate their contents, which, inspissating, form scabs. Successive crops ensue, and ultimately the whole face is covered, as with a mask.

**TREATMENT.**—Nurse the infant less frequently. Give occasionally a little rhubarb and soda to clear the alimentary canal, or an emetic if indicated; appropriate intermittents, as iron, quinine, etc. Externally,—milk and water, or mucilages of elm bark or sassafras. The ointment of three, diluted largely, may be employed,—or the white precipitate ointment.

*P. furfurans* resembles *pityriasis*: the eruption is minute, the discharge small, forming small scales which exfoliate like bran.

**TREATMENT.**—In all cutaneous affections of the scalp where scabs are formed, they should be removed by simple poultices before other applications are resorted to. In addition to the local applications already named, the following is useful.

R. Aluminis Sulphatis,  
Zinci Sulphatis, a. a. ℥ ii.  
Unguent. Simp., vel Adeps., ℥ i.

Mix intimately, and apply twice daily.

*P. lupinosa*, is described by Mitchell as a general eruption over the scalp, resembling a coat of plaster of paris,—the hair being matted together by a glutinous fluid, which drying into scabs, presents a uniform plaster-like surface.

**TREATMENT.**—Remove the scabs, and shave the head, before making any application: then adopt the treatment already described.

*P. decalvans*, consists of simple patches of baldness more or less circular, presenting a smooth, shining, and remarkably white surface. The name porrigo, as applied to this disorder, is certainly a misnomer, for there is nothing pustular about it.

**TREATMENT.**—To arouse the dormant energies of the hair follicles, the following preparations may be employed.

1. R. Cupri. Sulphatis, ℥ i.  
Aquæ, ℥ iv. M.

To be applied with a fine linen rag, thrice daily.

2. R. Saponis Linimenti, ℥ iv.  
Terebinth. Olei.  
Lytte Vesic. Tinct., a. a. ℥ ii.

Mix, and use as above.



3. R. Capsici Tinct.,  
 Cantharid. Tinct.,  
 Gall. Nuc. Tinct., a. a.  $\frac{3}{4}$  iss.  
 Cognis Aquæ,  
 Aquæ, a. a.  $\frac{3}{4}$  ii. M.

To be applied, night and morning, by rubbing a portion, ( $\frac{3}{4}$  i to  $\frac{3}{4}$  ii.) well into the affected portions of the scalp, using for that purpose a small piece of soft flannel or sponge, and continuing the friction until the surfaces are slightly reddened, and tingling.

The last of these formulas furnishes a combination of inestimable value in all cases where the hair falls, and especially where, after fevers, it has that tendency. In these cases, the mixture should be well rubbed into the scalp, with a piece of flannel, twice or thrice daily, and the friction continued until a slight sensation of tingling is realised. Baldness of years' duration has been overcome, and a good head of hair has been reproduced, by a persevering application of the above preparation, conjoined with the exhibition of appropriate intermittents and alteratives.

*Acne.* A disease of the sebaceous follicles, which enlarge, and become filled up, inflamed, and suppurative.

*A. rosacea.* When the disease is principally confined to the nose, and its integument assumes a fiery red, and highly vascular appearance, it is known by the above name; it is the *couperose* of the French, and the *copper nose* of the English. It is most frequently found in youthful subjects, and about the period of puberty, or afterwards, but it is not confined to any special time of life.

Its causes are often obscure. It is often complicated with a general derangement of health, as indigestion, amenorrhœa, etc.—but it is sometimes seen where the

general health is good, and the patient is not the subject of any vicious indulgence. The *A. rosacea* is often seen in connection with habits of intemperance, and sometimes in the youthful subject, with onanism.

**TREATMENT.**—If the health is impaired, or vicious practices are indulged, they should be promptly corrected. General bathing, and fomentations with sulphuret of potassa, two drachms, to eight ounces of water; or diluted alcohol, holding one grain of corrosive sublimate, in each ounce. The following is a very useful application.

R. Hydrarg. Ammonio chlorid. Unguent.,  $\frac{3}{4}$  i.  
Camphoræ Pulv., gr. xx. M.

To be rubbed in twice daily.

#### , 5th. *Squamæ, or Scales.*

*Psoriasis*; consists of patches of rough, amorphous scales,—continuous, or of intermediate outline; skin often chappy. It is found under a variety of forms, as the *P. guttata*, *P. diffusa*, (baker's and grocer's itch, and washer-woman's scall,) *P. gyrata*, and *P. inveterata* seu *Psora agria*, etc.

The surface, under the scales, is more tender than in lepra, which psoriasis often greatly resembles.

**TREATMENT.**—The more irritable forms are best let alone, confining the external applications to glycerine, which is, indeed, useful in all forms of irritable cutaneous eruption. The less irritable, may be bettered by emollient applications, and when the surface is cleansed, by slightly stimulating ointments or washes. Attention should be had to the secretions, and constipation overcome by small doses of podophilline or irisine, combined with leptandrine.

The constitutional remedies may be prussic acid and tincture of cantharides, or prussic acid with Fowler's solution.

A solution of prussic acid, four to twenty drops to the ounce, may be applied in the more irritable forms, with advantage; an infusion of opium, or a solution of the extract of henbane, may also be employed. The ointment of the oxide of zinc, or of nitrate of silver, one drachm to the ounce will be useful when the irritation has been subdued. The diet should be nutritious and non-stimulating, and all stimulating drinks should be scrupulously avoided. Cold bathing will be useful, followed by brisk friction.

*Pityriasis capitis*, or "dandruff" of the hairy scalp of children, often arises from want of cleanliness,—sometimes from lack of the usual secretions, and occasionally from an atonic condition of the scalp.

The *treatment* must first premise cleanliness,—then restoration of the secretions, and the employment of suitable stimulating remedies.

The wash No. 3, given under *P. decalvans*, largely diluted, may be used with great advantage.

*P. Versicolor* occurs in yellow, dirty spots, generally on the necks and foreheads of females of feeble health. The application of the mineral acid washes, or of the sulphuret of potassa will be found useful; and where the health is impaired, the appropriate constitutional treatment should be employed.

#### 6th. *Maculæ*, or *Spots*.

*Lentigo*, or "freckle," a name given to the multifarious, small, brownish yellow spots, so commonly seen on

the face, hands, and neck of those having a fair complexion, and delicate skin. They are most abundant in childhood and youth, and more common on females than males. Lentigo is not a subject for medical treatment:—those liable to freckle should avoid exposure to too full sun light, and protect the surface by some slight covering.

*Ephelis*, also called *chloasma*, *macula hepatica*, “liver spot,” etc., is characterised by one or more irregular shaped patches, of a light snuff color, or dark yellowish brown. They are most commonly found on the forehead, neck, or chest,—sometimes accompanied with itching, particularly on exposure to heat, or after the use of stimulants.

The patches, which are at first small, gradually increase, until in some cases they attain a very large size, looking much like a dried oak leaf imprinted on the skin. They are much more prominent on the approach of the catamenia, and during pregnancy.

TREATMENT.—Sulphurous water baths, or the sulphur vapor bath are the best remedial means; but any of the following washes may be advantageously employed. Sulphuret of potassa, (℥ i to O i) dilute sulphuric acid; (℥ ii to O i) dilute muriatic acid; (℥ iv to O i) sulphate of zinc; (℥ss to O i.) In some cases they may be promptly removed by blackening the disordered surfaces with the nitrate of silver; either the stick, or ointment may be applied.

*Nævus*.—Under the title of “nævi,” is understood a peculiar presentation of red spots, indicative of a morbid condition of the vascular system. They frequently remain indolent, and appear to be a simple dilation of the arterial and venous vessels distributed to the parts affected.

When elevated above the surface, and presenting the

same deep red color, they are formed of erectile vascular tissue, and are not then without dangerous tendencies.

The simple *nævus*, or "mother's mark," can generally be destroyed by the passage of fine needles through the red spot, and then cauterising with nitrate of silver, or caustic potassa.

Before closing this section, let us remind the practitioner, that in the treatment of all cutaneous affections, attention must be had to cleanliness, to the state of the stomach and bowels, and to the improvement of the general health. Baths, general and local, with washes and ointments: emetics, ant-acids, and intermittents of various kinds, with simple and nutritious diet; and in obstinate or chronic cases, Fowler's, or Donovan's solution.

### *Class 3d. Glandular Diseases.*

**1st. Parotitis**—A peculiar enlargement of the parotid gland, laying in front of and below the ears,—the disorder is popularly called "mumps."

**SYMPTOMS.**—Swelling of one or both of the glands, attended with an elevation of the temperature of the part; the enlargement sometimes extends to the submaxillary and sublingual glands. Rigors and fever mark the disorder throughout its course, which usually runs four or five days. The main source of danger, is the tendency of the magnetic development to be determined to the *mammæ*, or testes.

**TREATMENT.**—Nauseants, or an emetic, if the fever is strongly marked; and a cathartic may be conjoined if deemed necessary. Quinine, in half grain to grain and a half doses, with small portions of morphine, should be

administered at from intervals of three to four hours during the remissions. When the testis is implicated, warmth and moisture, by fomentations or poultices, are indicated, with stimulating frictions to the parotid glands. Not unfrequently there is more or less marked biliary disturbance, which should be met by small doses of podophylline and leptandrine, or irisine and leptandrine, with a full Dover's powder at bed time.

*2d. Scrofula.*—The scrofulous diathesis, or predisposition, is an evidence of the preponderance of the electrical state. It may be developed either externally, or internally.

*Externally*, it is manifested by an enlargement of one or more of the glands, usually of the neck, arm-pit, or groin. These enlargements are hard, and somewhat elastic ; of an oval shape, and more or less moveable. At first isolated, they often become aggregated as the disease advances, forming a large, irregular, lobulated surface. Under appropriate treatment, these enlargements may wholly disappear, or they may remain with little apparent change, for life ; but they not unfrequently proceed to suppuration, discharging a purulent serum, mixed with curdy matter. Preceding and attending these external developments, we have more or less marked constitutional disturbance, even Prof. Wood describes a "slight febrile movement, rather occasional than persistent."

*Scrofula mesenterica*, is indicated by an irregular appetite, feeble, voracious, or perverted ; the bowels are usually relaxed, though occasionally constipated, and the discharges are unhealthy in appearance ; there is more or less tumefaction or hardness of the abdomen, which is sometimes painful, and the pain is increased on pressure ;

colicky pains are frequent. The extremities are early marked with emaciation. The features gradually shrink, the surface unusually pale, and the general strength is greatly reduced. The breath is offensive, the exhalations from the surface are sour and disagreeable,—the urine is scanty, and of a milky appearance. The pulse is accelerated—more especially towards evening—when the febrile symptoms are all increased; the accession is “followed by perspiration early in the morning.”—(*Wood*). .

**GENERAL TREATMENT.**—When externally developed, the treatment may be topical as well as constitutional; but the constitutional treatment should, for some time, precede local applications. The tincture of iodine, the ointment of iodine, or of the iodide of potassa, or of the iodide of lead, may be applied to the hardened gland or glands, while at the same time the several preparations of iodine, and of iron, should be internally exhibited; the syrup of the proto-iodide of iron, is a very valuable combination.

The preparations of iodine sometimes induce relaxation of the soft parts at the back of the throat, muscular debility, languid circulation, etc.; in such cases, quinine will be most favorably conjoined; or the citrate of iron and quinine affords a very useful combination. *Mercury is always prejudicial, wherever the scrofulous predisposition exists.* The diet should be nutritious and abundant, and taken at regular periods, and due attention paid to the general secretions. Salt water baths are useful, if followed by brisk friction, to secure reaction; where not attainable, a warm bath of salt and water will often be found of advantage. Stimulating ointments are not appropriate; when the health conditions have been restored, the localisms will soon disappear,

Hood, in his admirable treatise on children, says, that for the restoration of the red color to the blood, no other remedy is equalled by the dilute sulphuric acid ; indeed he calls it, emphatically, the “infantile tonic.” The same writer is of opinion, that second in value to the sulphuric acid, stands the sulphate of iron, which he generally combines with the acid. The combination is of great advantage when the debility is marked, and should be continued until the tongue has lost its pale and flabby appearance. Annexed is a formula for the above combination ; it is a bi sulphate of iron. The sulphate is added to water, in a proportion a little greater than it can dissolve. To each six ounces of this super-saturated solution, one drachm of sulphuric acid is added ; and the solution of the excess of the salt is to be aided, by boiling in a glass vessel. The solution soon becomes transparent. The dose is from three, to ten or twelve drops, twice, or thrice daily, as the debility may indicate.

The foulness of the breath, the loaded tongue, and the torpor of the liver, may be corrected by a mild emetine or ipecac emetic, or by alterative doses of podophilline or leptandrine.

The various preparations of sarsaparilla are not, in our opinion, of any value in the treatment of scrofulous affections, beyond the advantages they may possess as media for the exhibition of the more active medicines.

Attention should be had to temperature, and so much out-door exercise should be taken as the strength of the patient will admit. Flannel, or wash-leather shirts, or jackets, should be worn, to preserve the surface from the influence of atmospheric changes.

**3d. Hepatitis.**—This modification of disordered action



is commonly known as inflammation of the liver, which may be chronic or acute. The latter, unless speedily arrested, destroys the energies of life,—the former is slow and insidious in its progress, and is manifested under a variety of phases.

**SYMPTOMS.**—The acute form is announced, as are all acute febrile disorders, by rigors and shiverings, with sharp pain in the right side, shooting up the back to the shoulder-blade. There is also a short, dry cough, some dyspnoea,—often nausea, and vomiting of bilious matter,—considerable fever,—tongue successively white, yellow, brown, etc., tenderness on pressure in the hypogastric region, etc.

**TREATMENT.**—Promote the nausea, or push it to emesis if the symptoms are urgent, and thereby allay the spasmodic action of the portal system,—instead of stimulating it to increased action, by the exhibition of mercurials, or drastic purgatives, as is generally advised, although now discountenanced by Prof. Dunglison.

Let mild laxatives, or enemata be administered, if irritating or excrementitious matters fill the alimentary track. The following are appropriate combinations.

No. 1.           R. Magnes. Sulph.,  $\mathfrak{z}$  i.  
                   Ipecac. Pulv., gr. viii.  
                   Opii Pulv., gr. ii.   M.

Put into  $\mathfrak{z}$  viii of boiling water: when cold, strain. Give one eighth every hour, until the bowels are moved.

No. 2.           R. Podophyllin., gr. vi.  
                   Leptandrin., gr. xii.  
                   Myrrhæ Pulv., gr. vi.  
                   Sapon. Hispan.,  $\mathfrak{z}$  ss.   M.

Divide into pil. xii. One every hour, or two, until action of the bowels ensues.

For the relief of the local pain, dry cups may be ap-

plied, followed, if required, by sinapisms. If the temperature of the part be high, a cold solution of the cyanuret of potassa will often afford great relief; sometimes the external surface is cold,—then the solution should be applied hot,—and the foot, or hip bath, may be conjoined as revalidents.

The febrile paroxysm is, then, to be met by remittents; the intermissions are to be improved by the exhibition of appropriate magnetic remedies.

The pulse will be found accelerated towards evening, with increased heat of the surface,—the paroxysm subsiding in the night; (*Wood.*) appropriately treated, it is a matter of little consequence whether the case is called “sthenic,” or “typhoid;” improperly treated, the “*sthenic*” will soon become “*typhoid*;”—and the “*typhoid*” rapidly sink into a yet *lower* grade of development.

The following, or some similar combination, should be continued for some time after convalescence.

R. Podophillin., gr. xx.  
Sanguinarie Pulv., 3 ss.  
Taraxaci Ext., gr. lxxx. M.

Divide into forty pills, of which one or two may be taken night and morning. The tepid or cold bath should be used daily, followed by brisk friction:—the diet should be easy of digestion, and well masticated, and the exercise adapted to the general powers of the patient.

*Chronic hepatitis* is more frequently seen than the acute; although it is often the result of an acute attack improperly treated, or not arrested by appropriate means.

SYMPTOMS.—Protean in their manifestations. Those most frequent are a painful sense of oppression and soreness in the epigastric and hypochondriac region,—dyspep-

sia, slight cough, a sallow and unhealthy color, tongue furred at base, with pain or sense of stiffness about the shoulder. After the persistence of these symptoms for a length of time, emaciation is apparent, with an increased unhealthy aspect of countenance,—the excretions are unnatural in color and odor,—the urine usually scanty, high colored, and often painfully voided; and in the female, the uterine function will be frequently found greatly disordered.

TREATMENT.—Attention to the secretions is of the first importance, and their restoration to the normal state includes the cure of the diseased condition. The annexed is a very serviceable combination.

R. Podophyllin., gr. xii.  
Leptandrin., gr. xxiv.  
Cicutæ Extract., gr. xlviij.  
Strychnine, gr. i.

Rub the strychnine with sufficient alcohol to make a solution,—triturate the pod. and leptand. therewith, until intimately blended—lastly, incorporate the mass uniformly with the extract, and divide into pil. xxiv; of which one may be taken thrice daily. So long as strychnine is administered, all acids should be scrupulously avoided. The pill No. 2, given in the treatment of the acute form, will be also advantageously employed: it may supercede the above in some cases:—the dose may be one, thrice daily, or less frequently should their action be too great.

Sometimes the following will be found advantageous:

R. Jalapi Ext., ʒi.  
Ipecac. Pulv., gr. x.  
Lobel. Sem. Pulv.,  
Capsici Pulv., a. a. gr. v. M.

Divide into pil. xxx,—of which two may be taken at bed time.

The nitro-muriatic acid bath is useful, as also are spongings of cold salt and water, followed by brisk frictions. The diet should be nutritious. If there is pallor and coldness of the surface, with great debility, the lactate, or phosphate of iron, with small doses of piperine, will be serviceable; and where the catamenia are scanty, or suppressed, the appropriate remedies should be conjoined. If the side is weak and cold, a rubefacient plaster will be of service; where there are lumbar pains, the galbanum plaster, with pulverised camphor and opium, will be appropriate. If any hepatic enlargement, the iodide of potassa ointment,—conjoined with two grain doses of the iodide, thrice daily. In obstinate cases, irisine and styl-lingine, will meet all the indications for which alterative doses of mercurial preparations, have heretofore been advised.

Under the above treatment, there is sometimes heat, tenderness, and even pain about the liver:—these, if not severe, are favorable,—they indicate that the organ is recovering its long dormant powers, and throwing out from its vessels their morbid, accumulated, and acrid contents.

*4th. Jaundice.*—May be the coincident, or the sequence of hepatitis; but it is *per se*, the direct result of spasm of the gall ducts.

**SYMPTOMS.**—General sallowness, or yellowness of the cuticle,—most strongly marked under the nails, and upon the conjunctiva, the forehead, and the neck. The color is caused by absorption of bile, and its deposit beneath the cuticle.

**TREATMENT.**—When not preceded by any prior hepatic disturbance, the reduction of the spasm is alone indicated. For this purpose we have employed, with much advantage, the following :

R. Potassæ Cyanureti, gr. ii.  
Hyosciami Extracti, gr. xxxii. M.

Make into sixteen pills, of which, one may be given thrice daily. If there is attendant constipation, leptandrine may be added to the above. Sometimes an emetic may be indicated, particularly if much tendency to nausea ; and occasionally a full cathartic of podophilline and leptandrine, or castor oil and turpentine. When the color has about disappeared, the annexed pill may be continued, with advantage, for some time.

R. Potassæ Cyanureti, gr. iii.  
Leptandrin., gr. xxiv.  
Cicutæ Extracti, gr. xxxvi. M.

Divide into twenty-four pills, of which, one should be taken night and morning ; and the trunk should be protected from atmospheric changes, by flannel worn next to the surface. The tepid or cold sponging with salt water, followed by friction, should not be overlooked.

#### *Class 4th. Urinal Diseases.*

**1st. Nephritis.**—When there is a magnetic determination to the kidneys, sufficiently intensive, to give rise to that disorder known as nephritis, the following symptoms are developed : rigors, fever which is generally remittent, although it has occasionally the intermittent form, (*Wood*) pain in the loins, usually on one side,—frequent desire to micturate, with much nausea and some vomiting. The

pain courses in the direction of the ureters, from the kidneys to the bladder, and the testis is not unfrequently swollen, retracted, painful, numb, and tender to the touch.

Nephritis may be contra-distinguished from rheumatism very readily, as in the latter affection, none of the above distinctive symptoms are present.

CAUSES.—Cold, partial exposure, external injuries, irritants—as turpentine, cantharides, etc.

TREATMENT.—The “orthodox” text books mainly recommend bleeding, leeching, cupping, blistering, calomelising, and anti-phlogistic regimen,—and by the adoption of such a system of “routine slaughter,” legitimate medicine has, and not without good reason, been stigmatised as “the destructive art of healing.”

Nauseants, or a full emetic, dry cups, warm fomentations, hip baths, laxative enema, and Dover’s powder, will, by perseverance, secure a remission more or less complete. Then prussic acid, with mucilaginous drinks, and two capsules of copaiva, thrice daily. In *simple irritation* of the kidneys, indicated by scanty secretion, and a deep red color, accompanied with slight pain or uneasiness, and but little general febrile excitement, the following mixture will be useful :

R. Copaivæ Bals., ℥ i.  
Terebinth. Olei, ℥ ss.  
Etheris Nitrosi Spt.,  
Europæ Olei, a. a. ℥ ii.  
Camphoræ Pulv., ℥ ss. M.

A tea spoonful may be given every two, to four hours, until the urinal flow is free. Or the capsules may be given every four hours, with a tea spoonful of sweet spirits of nitre, in any mucilaginous drink, at intervals of two hours,

—and the action of the remedies may be further aided, by the application of a warm solution of cyanuret of potassa to the loins. When the pain or uneasiness is spasmodic, four drops of prussic acid, with twenty drops of laudanum, may be given every two hours.

*2d. Cystitis.*—Inflammation of the bladder is of much less frequent occurrence than urethritis, or irritation of the mucus membrane extending from the bladder, externally ; but we conjoin them in this article.

Together, we find patients complaining of a heavy, throbbing, or burning pain in the hypogastric region, which is tender under pressure,—frequent and painful micturation, with intense suffering at the neck of the bladder, which sometimes is continued to the external meatus of the urethra ; the secretion is small, and high colored.

The local developments are preceded by a chill more or less severe, followed by fever, with remittent or intermittent paroxysms.

**CAUSES.**—Cold,—irritants, as cantharides or turpentine,—gonorrhœa, the presence of calculi, etc.

**TREATMENT.**—Warm hip-baths, enema of warm water, or infusion of lobelia, soothing cataplasms, poultices of hops, wormwood, etc., the vapor bath,—injection of laudanum, forty drops in a couple of ounces of any warm mucilage, warm solution of cyanuret of potassa to the loins, and over the bladder,—dry cups to the sacrum. Internally, prussic acid, two to four drops, with sweet spirits of nitre a tea spoonful, in mucilage, every two to four hours.

The practitioner will frequently meet with chronic cases, in which the symptoms are greatly modified, and sometimes there will be superadded the discharge of a

ropy mucus. It is most generally met with in females of delicate health, and usually complicated with prolapsus uteri, constipation, and hemorrhoids. Where prolapsus exists, the first indication is appropriate utero-abdominal support; to this may be conjoined such local and internal means, as the individualism of the case may indicate. Dry cups, anodyne enema, a hot or cold solution of the cyanuret of potassa to the pubis, large vaginal injections of tepid, warm, or cold water; mucilaginous drinks,—capsules, with or without spirits of nitre, small doses of quinine with prussic acid, or with prussic acid and denarcotised laudanum, and attention to the general secretions. There are usually marked exacerbations or paroxysms of suffering, which should, during the remissions, be averted by appropriate intermittents.

The diet should be nutritious, and easy of digestion,—all stimulants, whether in meats or drinks, should be avoided,—exposure, and long standing upon the feet, are also to be avoided, and we need not add that *coitus* should be very sparingly indulged.

With the exception of those remarks which have especial reference to *the sex*, our observations, and the principles of treatment detailed, are equally applicable to the male patient.

3d. *Diabetes*, derived from *δια*, “through,” and *βαίνω*, “I pass.” This disease is characterised by an immense augmentation, and often a great alteration in the secretion of the urine, with excessive thirst, and progressive emaciation. Diabetes exists in two forms,—*insipidus* and *mellitus*,—the former simply a large increase of the urinal flow, without any change in its peculiar character or taste; the latter being also a largely increased flow, with altera-



tion in the fluid passed, having lost its urinal taste, and become sweet.

The quantity of urine passed in the twenty-four hours, is sometimes truly astonishing, amounting often to thirty pints, and in rare cases, to a yet larger amount,—each pint of the fluid containing, sometimes, from two and a quarter, to three ounces of saccharine matter. The saccharine matter replaces the urea, which is not found in any appreciable amount in the urine of those suffering under diabetes. The immediate cause of the disease is not ascertained, although the whole of the nutritive system is morbidly implicated. A large proportion of the urine must be formed at the expense of the system, as the weight of the egesta largely exceeds the solid and liquid ingesta. *Post mortem* examinations reveal nothing which tends to shed any light upon this singular disorder.

Diabetes is marked by a large preponderance of the electrical state,—but it has its marked paroxysmal phases, the patient's condition greatly varying at different periods of the day, and the urinal flow increasing or decreasing, as the varied phases are developed. There is the well-marked chill, or period of depression, characteristic of an added intensity of the electrical,—followed by a febrile accession; but upon the subsidence of the period of accession, the usual sweat of reaction is not developed. The functions of the skin suffer an inversion, and instead of an *external*, there is an *internal* sweat,—which added to the increase of fluids dependent upon a suspension of insensible perspiration, may to a great extent, account for the excessive quantity of the fluid voided by micturation.

The saccharine condition of the urine also differs greatly, whether from the treatment employed, the regimen

adopted, or the natural course of the disorder; nor is this a variation from much to little, but from urine highly saccharine, to the total absence of sugar. Nor is sugar the only constituent of diabetic urine, hence its conditions before the sugar disappears, and again before it reappears, should be the subject of close observation and analysis, affording, as they do, a nearer approximation to the solution of the diabetic phenomena, which may be further aided by a close examination of the antecedents, whereby we may, to a large extent, be enabled to ward off the disease, and ultimately to treat it more successfully.

Upon the disappearance of the sugar, urea will be found present in excess, as well as before its reappearance in the urine; but during its saccharine condition, urea is barely traceable therein.

Diabetes has been maintained to be an affection of the nerves, or of the liver; but the opinion of Dr. Prout, is doubtlessly the correct one, that diabetes is a form of indigestion, first affecting the non-nitrogenous, and afterwards, the nitrogenous constituents of the food.

The annexed deductions are from an excellent article on diabetes, by M. Schutzenbergen, of Stratsburg.

1st. Glucosuria is not an incurable disease, and, although the tendency to relapse is certain, it is possible, by perseverance, not only to remove the sugar from the urine, but also to bring the patient so far as to bear a varied diet, in which feculent substances may enter, without causing a relapse.

2d. The amount of glucose excreted, is sensibly proportionate to the quantity of feculent matter added to the food, and errors of diet may be discovered by the increase of glucose in the urine. The quantity of urine is equal to

that of the fluid ingested, and the latter is also proportionate to the amount of the feculent substances taken into the economy.

3d. Diet forms the principal part of the treatment of glucosuria; the food ought chiefly to consist of milk, fatty substances, butter, oil, eggs, and meat.

4th. The entire banishment of feculents seems necessary to make the sugar completely disappear.

5th. Small quantities of bread, viz., about three ounces per diem, are generally well borne, and do not excite a fresh secretion of sugar, when once it has disappeared.

6th. The powers of assimilation increase gradually, and it is possible, by means of chemical analysis, to ascertain the extent to which the peculiar diet and medicine ought to be carried.

7th. The effect of the diet is powerfully assisted by the use of certain therapeutic agencies, and especially by opium, in increasing doses, and by alkaline drinks. In this affection, the tolerance of the opium is very great.

8th. It is certain that the glucose is formed in the alimentary canal, and that the absorbents take it up, so that solid motions come to contain no sugar.

9th. Purgatives may cause a diminution of glucose in the urine, as more or less of the sugar which would have passed into the urine, is carried away by the liquid stools.

The above observations are instructive and of much interest, and by similar investigations, alone, can we arrive at a true exposition of this singular perversion of functional movements.

TREATMENT.—Diabetes *insipidus* will usually yield to the exhibition of prompt magnetic remedies, as quinine, iron, and opium, and the treatment should bear special

reference to the general health of the patient, and the maintainance of normal secretions. The vapor bath is of great advantage, used daily, or thrice weekly, and such remedies should be conjoined as determine action to the skin. Dover's powder, and iodide of potassium are both useful for the latter indication, with brisk frictions.

*D. mellitus* requires the utmost attention to the diet; the character of which has been already described. The exhibition of opium produces a prompt and marked change in the saccharine condition of the urine. Three pills daily, each containing a little less than half a grain of opium, may be administered in the commencement of the treatment, and as soon as tolerance is sufficiently established, the number should be gradually increased, even to the extent of fifteen, or twenty, daily. The bicarbonate of ammonia may also be conjoined, in doses of five to fifteen grains, three or four times each day.

Should the opium produce giddiness, somnolence, or gastric irritation, it should be suspended, and again resumed as soon as those effects have subsided.

Quinine may be often advantageously conjoined, or the salts of iron. In a marked case, where the urinal flow was almost four gallons daily, and the amount of sugar upwards of two ounces to the pint, the iodide of iron effected a prompt and most favorable change. On the ninth day, the urine was reduced more than one half, with a great reduction in the amount of saccharine matter; on the seventeenth day, the flow was almost normal, and the sugar only slightly traceable; and on the thirtieth day, all traces of the disorder had disappeared. The iodine gave increased activity to the absorbents, whilst the iron gave tonicity to the general muscular fibre.

Sometimes prussic acid, alone, or in combination with cantharides, the iodide of potassa, Fowler's solution, etc., may be advantageously conjoined; nor should attention to the skin be lost sight of. The vapor bath should be used daily, or on alternate days, and followed by brisk and continued frictions, more especially along the course of the spine.

Amelioration should be followed by strict perseverance in the use of the appropriate remedies; and their employment should be continued for months after the disappearance of the active symptoms, to avert the danger of a relapse. Nor should the patient revert to feculent diet, but with the utmost caution. When the sugar has almost wholly disappeared, two to four ounces of bread may be allowed daily; but should its use increase the quantity of the saccharine matter, it should at once be suspended.

#### *4th. Suppressio et Retentio Urinæ.*

A partial suppression of urine may occur from a variety of causes,—but more generally it is one of the attendants of fever; the secretion is suspended, but the renal function is not impaired.

When the urine is secreted by the kidneys, and cannot escape from the bladder, the patient is said to suffer under retention. In suppression, there is no fullness or hardness of the bladder, and no flow follows the introduction of the catheter. In retention, as soon as the catheter is passed, there is a full urinal flow. Should suppression continue long, it becomes dangerous,—the patient becomes drowsy, or even apoplectic, and the result is soon fatal:—this is an important fact in the history of such cases. It

is well to remember, that in suppression, the urine sometimes escapes from some other organ, as the stomach, or the skin : in these cases the secretion continues, but it does not pass off *per vias naturalis*.

If we suspect inflammation, or organic disease, we can add nothing to the means to be employed in nephritis. If the function is merely suspended, baths and frictions,—with tincture of cantharides, prussic acid, turpentine, copaiva capsules, tincture muriate of iron, etc., may be advantageously employed ; and sometimes a blister, or Granville's counter irritant, may be applied to the lumbar spine.

*Retention* not unfrequently occurs in infancy, just after birth, from temporary spasm of the sphincter vesicæ, paralysis of the vesical fibres, etc. The symptoms are distention, pain, and weight over the pubic bones, with no urinal discharge, etc. ; or if secreted and retained in the pelvis of the kidneys, the pain, weight, and fulness are found in the lumbar region.

**TREATMENT.**—The application of cold or hot solution of cyanuret of potassa to the pubis and loins ;—the warm hip bath,—the cold dash to the pubis,—relaxing enema of infusion of lobelia,—prussic acid five drops, with a tea spoonful of sweet spirits of nitre. In cases where the spasm is very unyielding, the introduction of the catheter, charged at the tip with belladonna ointment,—or a solution of the extract, or an infusion of the leaves of belladonna, may be thrown up the urethra to the neck of the bladder. Where paralysis exists, the catheter to draw off the secretion ; give cantharides tincture, ten to twenty drops, with prussic acid four drops, thrice daily ; or any of the remedies described under paralysis. The use of

the magnetic battery should not be lost sight of, nor should stimulating frictions to the loins be forgotten.

### 5th. *Incontinentia Urinæ.*

This annoying disorder is usually found in old men, who are laboring under enlargement of the prostate. There is a frequent and urgent desire to micturate, where the power of retention is not wholly lost.

In paralysis of the bladder,—paraplegia,—the detrusor urinæ muscle loses its power, the sphincter also becoming paralysed, whereby the power of urinal retention is wholly lost.

Temporary paralysis has, in many cases, followed *opiate enemata*, and it is a frequent coincident of “painter’s colic.” It may occur in childhood, and is sometimes complicated with verminous affections, and occasionally with fever.

**TREATMENT.**—If incontinence is caused by paralysis, the exhibition of cantharides and hydrocyanic acid will be found useful: or the following:—

R. Strychnine, gr. ii.  
Argent. Nitratis, gr. v. to x. M.

Make into mass with extract of gentian, q. s., and divide into twenty pills, of which one may be taken thrice daily. Frictions to the spine with stimulating liniments, cold hip-baths, electro-magnetism, etc., for which refer to paralysis.

When caused by enlargement of the prostate, the iodide of potassa, in two to five grain doses, should be given thrice daily, and the ointment of the same applied to the perineum.

Prof. T. D. Mitchell gives the annexed formula :

R. Acidi Benzoici, ʒ i.  
Copaivæ Bals., ʒ ss.

To be well blended with the whites of eggs, and eight ounces of camphor mixture added. Dose, two tea spoonful three times daily.

The same author says, a girl of fourteen years of age, was speedily cured of incontinence, by three grain pills of benzoic acid, administered four times daily.

Incontinence in females may be sometimes promptly cured, by slightly touching the *meatus urinarius*, with nitrate of silver. Considerable irritation is necessarily excited, and the moment a portion of the urine comes in contact with the parts, pain is produced, and the flow ceases.

In verminous cases, the usual remedies for worms. For incontinence at nights, evacuate the bladder at bed time, and give a full sedative, to be followed, the next day, with quinine or muriated tincture of iron.

## SECTION X.

### INTERMITTENT FEVER, WITH FIBROUS MODIFICATIONS.

#### 1st. *Rheumatismus*,—*Rheumatism*.

This is one of the two *constitutional* diseases, treated *as such* by Dr. Wood, in his ponderous tomes on practice.

We meet, nosologically, with three varieties of rheumatism,—*Acute*, *sub-acute* and *chronic*.

The acute form is recognised by chills or rigors, alternating with fever, which is soon followed by stiffness and



pain of some of the large joints of the extremities,—the inferior ones are usually the first attacked,—the pain sometimes partially subsides after tumefaction,—the affected parts are tense, elastic, and red, and although the skin may be daily covered with a profuse perspiration, it affords no relief.

At the first manifestation of the local development, but a single joint may be implicated ; soon others of the same limb are involved, followed by similar disturbance of those of the opposite limb :—or, leaving the inferior extremities, to a large extent, it may be next manifested in the superior,—or the order of the attack may be reversed.

A furred tongue, with alternations of chills and fever, mark the progress of the disorder ; the remissions are most perfect in the mornings, with exacerbations towards the evening, or even after noon.

During the successive paroxysms of the disorder, the fibro-serous tissues of the heart may be implicated, indicated by dyspnœa, anxiety, great precordial distress, with tumultuous action of that organ. This complication, is said, by the authorities to be very common, and it is, indisputably the result of the expectant treatment of the French, and the bleeding, black draught, and calomel practice of the English and American disciples of legitimate medicine.

The duration of rheumatism is from two, to six weeks, or as many months, when the patient unfortunately falls into the hands of a legitimate lancet and calomel practitioner ; for should the attack commence in the fall, it is little short of a miracle, if the disease disappears before the following spring : nor is this result, and the perpetuation of the disease from week to week, or from month to

month, a matter of surprise, when we bear in mind the practice adopted, Like the mill-horse treading his ceaseless round, the "legitimate" practitioner pursues one unending routine of bleeding, cupping, calomel, and cathartics, repeated with each returning paroxysm or exacerbation; and when the *remission* is manifest, as it always is, regardless of any mode of treatment—it is mistakenly attributed to the heroic and depletory measures, which may have been employed.

Prof. T. D. Mitchell, acknowledges that the pathology of rheumatism is not fully comprehended; and although he admits that it has been successfully treated with quinine, he is at a "loss in reference to the action of the sulphate in this disease." Here he "fails to recognise the true explanation," to wit, that rheumatism is, as he declares to be the fact with all fevers, "essentially periodical, and therefore curable with anti-periodic medicines."

CAUSES.—Hereditary predisposition,—susceptibility thereto, from preceding attacks,—exposure to cold, or to sudden variations of temperature,—remaining in wet clothes,—sleeping in damp sheets, etc.

TREATMENT.—Much as we dislike to dissent from the "authorities," yet when opinions, or dogmas, are uttered from professional chairs, errors in "time honored" institutions, which are repugnant to common sense, at variance with sound reasoning, and inconsistent with the evidences of a true pathology, (which they declare is not yet understood, even by themselves,) we must be excused for our dissent, and for the rejection of all such opinions and authoritative dogmas.

Should these "authoritative" and antiquated lecturers, met with this article, in which we declare that we have

never yet either bled, or given calomel, to a patient suffering under acute rheumatism, they will probably be amazed,—and in their amazement declare that we are laying down erroneous principles, inculcating “heterodox” views, and recommending a dangerous and fallacious practice. But “*experientia docet*,” is one of their motives, and so is it ours; and it is because success has proved the correctness of our principles, when reduced to the practical test, that we feel prepared to maintain and defend them.

The authorities very generally recommend venesection in the treatment of acute rheumatism, yet Eberle says, “so far from proving beneficial, it leads often to disastrous results, for experience has fully established the fact, that metastasis of the local (?) affection to an internal organ, is particularly favored by draining the system of its blood, and impairing its vital energies.”

Dr. Johnson, (*England*), says, “excessive blood-letting favors metastasis to internal parts.” Dr. Wood,—“bleeding, alone, often fails of curing the disease,”—and again, “even if venesection be carried to such an excess that it causes collapse of the blood-vessels, the disease does not necessarily cease,”—“sudden death has resulted from transfer of rheumatic irritation to the heart, *after* copious depletion.”

Prof. Dunglinson, and Wood, consider the inflammation of acute rheumatism peculiar—they perceive that it differs from all other inflammation, as shown by its *shifting* about—leaving, in a single hour, no trace of its previous existence; they also notice the important fact, “that there is no tendency to suppuration, even in the most violent cases.” And yet they bleed—they recommend at least

one bleeding ! because there is an (imaginary) inflammatory diathesis,—“ a local inflammation,”—because the pulse is full, or the patient vigorous ! How truly philosophical ! how wonderfully consistent is legitimate medicine ! Need we be surprised that the pampered sons of wealth should prefer these astute practitioners, because of their *age*, their persistence in the most absurd fallacies, and their large *experience* in the most approved modes of depletion !

Say the same authorities, “ the skin is often bathed in perspiration,”—“ the affection rapidly leaves parts, etc.”—“ buffy blood is seen in diseases unquestionably *neuropathic*—that are attended with great velocity of the circulation”. Hence, from the testimony of these authorities, rheumatism is either a remittent, or neuropathic disease, or both ;—and it is because of its paroxysmal remittency, that it is promptly controlable by magnetic remedies, exhibited during the paroxysmal remissions.

Dr. Haygarth, M. Briquet, Trousseau, and numerous writers in *Braithwaite's Retrospect*, have borne testimony to the value of bark, or quinine, in the treatment of acute rheumatism. Trousseau correctly maintains that it may be combatted in the same way as intermittent fever ; but being liable to relapse, the quinine should be continued for some time after the subsidence of the active symptoms. So long as the patient sweats, has no appetite, and the pulse abnormal, the rheumatic diathesis must be supposed to exist.

M. Bouillaud, a name found in all the legitimate authorities, bleeds once, twice, thrice daily, to strangulate the disease ; and with what result ? One half, says he, have endocarditis, or pericarditis.

Dr. Hope, whose practice is also authoritatively approved, recommends ten grains of calomel, and half a grain of opium, at bed-time, with a *black draught* the next morning, thus harassing a helpless patient with all the inconveniences of from four to six evacuations.

Mc Intosh, though a great bleeder, and not opposed to mercurials in general practice, says,—“I have seen the tongues of patients swollen and ulcerated, and profuse salivation produced, without the least sign of amendment.”

THE TREATMENT of acute rheumatism, as it is developed by the principles of the “new school” philosophy, will be found not only prompt, but effective.

An emetic, and a cathartic if indicated, should be exhibited,—as soon as the pain is at all alleviated, give quinine and morphine in the following proportions;—two grains of quinine every two hours, three grains, every three hours, or four grains every four hours,—giving morphine, one third of a grain, every four hours. To the above, prussic acid may be conjoined, in doses of from three to five drops, every four hours; and to the affected joints, the cold solution of the cyanuret of potassa should be applied, the parts being wrapped up in cloths, several times doubled, and kept cool by frequent changes.

Poultices or fomentations of stramonium, henbane, or hops, may be employed, where the cyanuret of potassa is not attainable: the solution affords the most prompt relief, and should always be used, when within reach. *Occasionally*, the cold application is not as comfortable to the patient, as warm ones,—when one of these exceptional cases presents, the solution may be employed either warm or hot.

Sometimes the alcoholic extract of aconite is very ben-

officially administered; it should be given in half grain doses, every two hours, and the dose may be increased to one grain on the second day: but where the aconite is exhibited, quinine should be administered, in four grain doses, every four hours. By this treatment, the adynamic condition, indicated by copious perspirations, particularly during sleep, and nervous disturbance, (*Wood.*) is averted,—but it is not until that state is developed, that the learned professor advises the exhibition of one grain of quinine, every hour, with the remark that he “scarcely ever knew it to fail.”

Dr. Wright, of Queen’s Hospital, trusted to the *alkaline treatment*, for six years. Not a single case terminated fatally: he bled none from the arm, but in some cases, cupped, for the local (?) affection. The annexed is his formula.

R. Sodæ Bi carb., ℥ ii.  
Mist. Camph., ℥ viii. M.

Two large table spoonsful every three hours—drink toast water—hot alkaline bath at bed-time, and the affected joints wrapped in cloths saturated in the same.

Prof. J. K. Mitchell recommends cups to the spine, and says they alone are sufficient to cure the complaint. In the same manner, it will be remembered, Gondret, of Paris, (a “new school” practitioner,) cures the ague,—and hence another proof, if further proof was requisite, of the unity of the type of all disease.

We have no difficulty in the treatment of acute rheumatism; we find this modification of disease as submissive to a true practice, as any other form of disturbance. Recent cases seldom exceed a week in duration; we have

not, for years, witnessed a case which has continued beyond the tenth day.

*Rheumatism chronic.*—Pains in the hips, shoulders, knees, and other large joints or muscles. The pain may be confined to a single joint, or it may frequently change its location; it is not marked by redness of the parts affected, and seldom by any swelling. Although unattended by danger, painful lameness is often induced; and after the subsidence of the attack, very slight causes are sufficient to reproduce it. Neither the acute or chronic forms are suppurative; but an effusion of coagulable lymph frequently causes a permanent thickening of the parts.

*TREATMENT.*—The great preventive, and one of the most efficient curative agencies, is flannel worn next to the skin. Rubefacients, with brisk frictions are useful, and the warm bath, at a uniform temperature, (about 102°) used daily, and followed by brisk friction, is exceedingly useful.

The fumes of camphor are often very advantageous. The patient may be seated upon a chair, and covered with a blanket. Under the chair a heated plate of iron should be placed, bearing on its surface half an ounce of gum camphor. A copious sweat, and immediate relief is the result. The operation may be repeated daily, and seldom requires more than three or four repetitions.

*Guaiacum* is sometimes a serviceable remedy, in fifteen to thirty grain doses of the pulverised (so called) gum, thrice a day; it may be combined with Dover's powder, if indicated by the severity of the pains.

The sulphuret of carbon, or more correctly the *bi* sulphuret, is sometimes a very efficient remedy. It should

never be exhibited in the acute form. One part of the bi-sulphuret of carbon, is dissolved in two parts of alcohol, of which four drops may be given every two hours; and at the same time the painful parts may be touched with a liniment of one part of the bi sulphuret, with two parts of sweet oil, the mixture being well shaken.

Turpentine, in the dose of a drachm, blended with honey or molasses, and given once or twice, daily, has afforded relief in some obstinate cases, particularly those known as lumbago, and sciatica.

Prickly ash (or its alkaloid *xanthoxylin*) is a very serviceable remedy in chronic rheumatism. The dose of the powdered bark is from ten to twenty grains.

Where there is thickening of the parts, iodide of potassa may be useful; and the ointment of the same, locally applied.

Where the muscles of the shoulders and arms are most prominently affected, the following will be found very useful:

R. Colchic. Vin. Rad. Saturat.,  $\mathfrak{z}$  i.  
Potass. Arsen. Liq.,  $\mathfrak{z}$  ii. M.

Twenty to twenty-five drops, thrice daily.

### *2d. Arthritis, or Gout.*

There are some points of analogy between gout, and rheumatism, but in many important features they are widely dissimilar.

Gout is periodically repeated, and its attacks are paroxysmal and intermittent; it may arise from hereditary predisposition, or be induced by intemperance and high living.



The following tabular view is of interest, exhibiting as it does, the distinctive *modes* of these two modifications of the one type of disease.

RHEUMATISM.	GOUT.
1. Attacks the young and robust.	1. The middle-aged, and old.
2. Attacks the large joints and muscles.	2. The small joints.
3. Attacks often numerous joints at once.	3. But one or two at a time.
4. No desquamation.	4. Vivid inflammation, and desquamation of cuticle of toe.
5. Often profuse perspiration.	5. No perspiration.
6. Not distinctly hereditary.	6. Always hereditarily predisposed.
7. Rheumatic irritation determined to the heart.	7. Irritation of gout determined to head and stomach.
8. Rheumatism frequently attacks the poor, and those subjected to toil.	8. Gout punishes the rich, and those addicted to riotous and luxurious living.

NATURE OF GOUT.—This is a mooted point, and great diversity of opinion exists thereon. Dr. Holland, so well known to the profession, is here a *humoralist*, maintaining with many other authors, that there is “a morbid ingredient in the blood.” To support this hypothesis, are the facts, that there is usually an increased secretion of uric acid, lateritious sediments in the urine, and depositions of the same, as urate of soda, in or about the joints. And yet *uric acid is secreted, and excreted in largely increased quantity*, in many complaints where there is no trace of gout.

Others, among whom is the late Dr. Chapman, refer it to some disease of the digestive organs. Such is the ingenuity, and the unity of theory of the authorities in legitimate medicine.

But what are the facts elicited in the actual developments of the disorder? The attack, says the patient, was preceded by taking too much wine, or by getting wet, or by exposure to the east wind, or by mental excitement; the result of some domestic difficulty, or social squabble. Thus gout may be induced by almost anything capable of producing mental excitement, and physical depression; and Drs. Paris and Darwin admit that the gouty fit has been brought on by loss of blood, or by an active purge!

Of the true treatment of gout, what do our learned doctors know? what know they of its real nature? Upon the treatment no two are agreed, except it to be to bleed, and purge, during the paroxysm,—or to *eliminate* or *de-purate* the lithic acid from the system:—in fact their theories and modes of treatment are as numerous as the letters in the alphabet.

The sum of the matter may be very simply resolved by the enquiry,—is gout a periodic disease? does it obey the great law of repetitive paroxysm common to all other diseases? In common with every other constitutional disturbance, has it febrile paroxysms, alternating with an intermission of symptoms? has the gouty patient chills, heats, remissions? are his secretions abnormal, increased, decreased, morbid? But one answer can be given to these enquiries, and that answer is strongly affirmative; every case bears upon it these undeniable evidences of the unmistakeable relationship of gout to the primal type of all disease. The swelling of the joints is only the local development of a great constitutional wrong; for how could a passion, or the east wind induce an attack, excepting through their influence upon the brain and nerves?

The true treatment of gout can only be attainable

through the great nervous centers. Have not the passions, terror and rage, caused and cured the disease in those predisposed thereto? Numerous cases are cited in "legitimate" works, (*Watson's* and others) proving that gout has been *immediately cured* by an intense mental emotion; and yet, in the face of these, their own attested facts, they continue to talk about a "poison," a "morbid ingredient in the blood"—about *eliminating* and *depurating* the "lithic acid," before the disease can possibly be cured. But what becomes of this poison, this morbid ingredient, when the gout is cured, *instantly*, by a passion, as admitted by *Watson*? By what sudden explosion is it driven from the system, and where its outlet? How does the *momentary* passion which cures the gout, at the same time cleanse the blood from the assumed "morbid ingredient," upon which the disease is said to depend? Lithic acid, or any other excessive secretion, *is the result* (not the cause) of a previous constitutional disturbance of the totality of the system; and it is because, during the paroxysm of such constitutional disturbance, the brain and nerves cease to maintain a perfect control over the functions, that the secretions, and the condition of the blood become changed.

The admitted instantaneous cure of gout, by a passion, (*see Watson.*) or other mental emotion, is a complete death blow to the humoral or "morbid ingredient" theory of the origin of the disease.

TREATMENT.—Colchicum, quinine, hydrocyanic acid, iron, arsenic, and other constitutional remedies, have each been used with perfect success; they succeed, as a passion or mental emotion succeeds, because they primarily influ-

ence the brain and nerves, and through the cerebro-spinal system, the entire organism.

The paroxysm should be relieved by appropriate remittents,—and these promptly followed by intermittent combinations.

Colchicum has cured fever and ague, where almost all other remedies had failed, and it is also the most generally serviceable agency in the treatment of gout, affording another evidence of the unity of disease in the primal type; but that it does not possess any *specific* action, is thus admitted by Prof. T. D. Mitchell; “I do not believe that this medicine ever cures by any sort of specific influence. Unless the medicine excite nausea and vomiting, or purging, or both, (true remittent action, *authors*,) I doubt whether it is ever remedial in the proper sense of that term.” Procure a remission of paroxysmal symptoms, by colchicum, aided by emetine, or lobelia, and then promptly exhibit intermittents to avert the repetitive paroxysm.

In chronic cases, quinine with morphine, or combined with Huxham’s tincture and sulphuric acid, or Fowler’s solution with prussic acid, and tincture of cantharides.

The practitioner should throw aside the hypothetical notions of inflammation, or of poison in the blood, and pay attention to paroxysm and remission.

All our authors say the fits generally occur in the night, and wear off by morning, to recur the next night, etc.,—and those are the cases that have been cured with quinine and colchicum, given during the day, *after* bleeding and purging have proved inefficient. Where quinine and colchicum fail, arsenic, or combinations of other internal remedies will succeed.



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A few typographical, and other errors, will occur, despite much careful reading and corrections. The reader will please note the annexed

### ERRATA.

- Page 12, line 1—read *tions* for *tiens*.  
 “ 12, “ 1—read *repulsion* for *repulion*.  
 “ 20, “ 17—read *Lettsom* for *Letzham*.  
 “ 36, “ 18—read *Hewson* for *Henson*.  
 “ “ “ 26—read *gr. xv.* for *gr. xv.*  
 “ 37, “ 4—read *Salamandra* for *Salamandrine*.  
 “ 74, “ 31—read *valerianate* for *valerinate*.  
 “ 124, “ 12—read *chloridi* for *chloridi*.  
 “ “ “ 14—read *Sarsap* for *Sarsæ*.  
 “ 126, “ 26—read *are* for *is*.  
 “ 128, “ 18—read *Meigs*.  
 “ 129, “ 1—read *Guerent* for *Guerent*.  
 “ “ “ 4—read *Vallieux* for *Valleux*.  
 “ 130, “ 6—read *confined* for *conjoined*.  
 “ 143, “ 12—read *Dietl* for *Diettz*.